REGIONAL TRENDS AND PATTERNS OF EMPLOYMENT OF SCHEDULED CASTE POPULATION IN UTTAR PRADESH

ABSTRACT

THESIS

SUBMITTED FOR THE AWARD OF THE DEGREE OF

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BY

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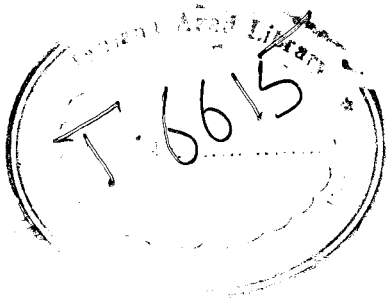

ABSTRACT

Employment, a complex concept is one of the most significant aspects of population composition of a region. It has multilateral involvement in the production of goods and services and in turn provides information about the human resources and the nature and extent of their utilization. There is a direct relationship between employment and socio-economic development of a region. If the employment rate increases the level of socio-economic development also increases and vice versa. However, the level of employment and structure of employment in any area depend upon a variety of physical, economic, demographic, social, cultural and political factors. Development of socio-economic infrastructure facilities may be considered as a function of economic development as these represent those services without which primary, secondary and tertiary economic activities cannot function. The quantities of employment available in the region, its outlook, mobility etc, all have bearing on the development of socio-economic infrastructure facilities of that region. Thus it may easily be interpreted that the magnitude of participation in economically gainful activities is an index of socio-economic status of any segment of the society including the scheduled caste population. Scheduled caste people are socio-economically backward and they account for 21.14 percent of the total population of Uttar Pradesh, the most populous state of India. They exhibit a relatively high employment rate (34.7 percent) in comparison to the total population (32.5 percent) of Uttar Pradesh but they are living in extreme poverty, deprivation and social discrimination. Nearly 87.67 percent of the total scheduled caste population dwell in country side and they are still directly or indirectly dependent upon the primary sector of economy. Thus the researcher aims at bringing scheduled caste employment (rate and structure) into a sharper focus so that the importance of efficient use of all the available human resources for the poverty alleviation, reduction of inequalities between various social and cultural groups, and high pace of

socio-economic growth can be highlighted. In this regard an attempt has been made to analyse the 'regional trends and patterns of employment of scheduled caste population in Uttar Pradesh' with certain major objectives. First of all it has been intended to show the trends and patterns of scheduled caste employment in Uttar Pradesh since 1971. Secondly it compares the scheduled caste employment trends in Uttar Pradesh with the employment trend of total population of the state and scheduled caste population of the country, after that the analysis of the general patterns of scheduled caste employment at district level is made and differentials of employment rates (total, rural and urban) are tested with various selected socio economic determinants. Next, the study focuses upon the sector-wise analysis of scheduled caste employment i.e., major employment groups in the state and analyses separately the determinants which may influence the differentials of major employment groups and lastly it is meant to demarcate the employment and development regions and as to how they are related with each other. The present research work is divided into six chapters, excluding introduction and conclusion. The first three chapters are fully theoretical, whereas, the last three are mainly analytical. The first chapter explains the concept of employment given by many national, international organizations, reports, geographers, demographers, sociologists, economists, planners, thinkers and researchers etc. Moreover this chapter also takes into account a brief description of various determinants of employment. Chapter two is explaining various techniques used for the completion of this work and a brief review of the related studies done in India as well as abroad. In the chapter three, the physical and cultural settings of the study area is discussed. Fourth chapter explains the general trends and patterns of scheduled caste employment. At the same time it is also meant to test the differentials of employment with various socio-economic determinants. Fifth chapter analyses the employment structure as well as employment regions of scheduled caste population. The significance of selected socio-economic indicators is tested with the statistical

techniques of (Karl Pearson coefficient of correlation and factor analysis). The sixth and the last chapter assess the levels of socio-economic development and employment rate verses socio-economic development. The broader conclusions of the present study need to be highlighted here.

The study regarding the working population of scheduled caste clearly indicates that scheduled caste population of the state presents a comparatively higher percentage of workers than the percentage of workers of the total population of the state. The comparatively high employment rate among the scheduled caste population may be associated with relatively high incidence of female employment among them. This could be attributed to the economic exigencies and social permissibility in this section of society. Moreover, the kinds of jobs taken up by this group of people especially the females do not have any demand on education or skill.

The scheduled caste people also display relatively higher employment rate in rural areas (35.8 percent) than in urban areas (27.1 percent). The bulk of the scheduled caste workers in the countryside are engaged in either agricultural sector, covering cultivators, agricultural labours etc, or in the household industry (covering the traditional occupation), construction or in menial service sector where literacy or education is not an occupational necessity. In case of urban areas, education and literacy are prerequisites for certain employment; this not only delays but also reduces the employment rate. The percentage of marginal workers have been continuously increasing in total population as well as in scheduled caste population and this increase is more pronounced in scheduled caste population. The gradual increase of marginal workers among the scheduled caste population seems to be associated with the continuous increase in the growth rate of scheduled caste population in the selected decades and also due to advancement in agricultural techniques which has replaced the human labour with machineries and full time work has been replaced by seasonal work. Besides these the increased opportunities in

construction sector (a form of seasonal work) due to privatization is also pulling the rural scheduled caste people in urban areas for this seasonal work.

The variation in rural scheduled caste employment rate is much similar to that of total population. However, the range of variation is considerably wide (27.39 per cent to 48.03 per cent) in rural scheduled caste population, whereas, it is quite narrow (22.85 to 35.07) in urban scheduled caste population. In rural population of scheduled caste, the regions of very high and high rate of employment is observed in the southern districts of the state, whereas, a compact pocket of low employment rate is observed in eastern districts and majority of the western districts are showing very low level of employment rate. In its urban counter part the very high and high employment rate is observed in majority of south western districts of the state. A belt of its medium grade, consists of central districts running from south to north, separate the discontinuous region of very low grade in the west and low grade in the east.

The variations in employment rate of rural scheduled caste population are significantly determined by the indicators X_5 (per capita net sown area), X_6 (cropping intensity), X_8 (net irrigated area), X_{12} (per cent of scheduled caste urban population), X_{14} (total employment rate of scheduled caste population) and X_{17} (scheduled caste literacy rate). In urban population this variation is mainly caused by X_{12} (per cent of scheduled caste urban population) and X_{13} (per capita income).

Contrary to the total male employment rate of scheduled caste population, rural males are showing a very narrow range of variation in their employment. It varies from 42.4 per cent in Gautam Budha Nagar to 56.7 per cent in Shrawasti district. From the figure of its graded distribution, it is clear that maximum degree of scheduled caste employment rate is observed in a compact pocket of central and eastern districts. High grade of employment is observed in a pocket of southern districts and this gradually decreases towards east as well as towards west. Urban scheduled caste employment rate varies

from 38.7 (Deoria) to 50.0 per cent (Shrawasti) district. However, the distribution of various grades of urban employment is not displaying any regular pattern. Only one big region of low grade employment is observed in the eastern part of the state.

It may be concluded that the indicators viz, X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{29} (total male employment rate of scheduled caste population) and X_{31}(urban male employment rate of scheduled caste population) are the chief determinants though the magnitude of their effect is different. The analysis of linear correlation leads to the main conclusion that X_{16} (urban employment rate of scheduled caste population), X_{29} (scheduled caste total male employment rate) and X_{30} (scheduled caste rural male employment rate) have substantial impact on the distribution of employment rate of urban male scheduled caste population of Uttar Pradesh.

In case of rural scheduled caste female employment, the range of variation is 5.9 per cent (Shahjahanpur district) to 42.1 per cent (Chitrakoot district), i.e., very close to variation of total females of scheduled caste population. The participation of scheduled caste females gradually decreases from southern to eastern and western districts reaching to its medium grade in the east and very low grade in the western half of the state. This pattern gets slightly changed in the urban counter part of scheduled caste females. The urban female employment rate gradually decreases toward the east but the homogeneity of low grade of female scheduled caste employment is broken by other grades.

The results of correlation of rural scheduled caste females lead to conclusion that X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population),), X_{29} (total female employment rate of scheduled caste population) and X_{31} (urban female employment rate of scheduled caste population) are the chief determinants but the magnitude of their effects are not equal. It is analysed that regional variation in employment

rate of urban female scheduled caste population is mainly caused by X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{29} (total female employment rate of scheduled caste) and X_{30} (rural female employment rate of scheduled caste population) which are the chief determinants but with different magnitude.

The results clearly indicate that the scheduled caste population is still overwhelmingly engaged in primary activities. As many as 16.21 percent of the scheduled caste workers in Uttar Pradesh are engaged in primary activities. In rural areas about 18.1 percent of the scheduled caste workers are engaged in primary activities. Even in urban areas 2.68 percent scheduled caste workers are in primary activities. Next in importance to primary activities are the tertiary occupations such as trade and commerce, transport, storage, communication, financial intermediation, real estate, renting and business activities, public administration and defence, compulsory social security, education, health and social work, other community, social and personal service activities, private households with employed persons, extra territorial organization and bodies. The regional variation in the distribution of scheduled caste employment under major occupation groups is quite notable. Primary occupations of scheduled caste is characterized by a gradual increase from eastern to central and south western part of the state and then it started decreasing towards the west and south eastern part of the state. As far as the secondary group of economic activities is concerned, they are showing an irregular pattern, whereas, the tertiary group of economic activities increase from east to west.

The test of correlation signifies that industrialization, scheduled caste population growth rate, density, percentage of workers in secondary and tertiary occupation is showing a significant negative relationship with primary occupations of both the rural and urban population of scheduled caste. The inverse of it is observed in case of secondary and tertiary groups of rural and

urban populations. The overall assessment of employment force regions based on the location quotient reveals that eastern and southern districts account for high magnitude of scheduled caste employment force, whereas, majority of the western and central districts record the low magnitude of employment force. The general picture that emerged from the regional distribution of economic development shows, few smaller patches of high economic development of scheduled caste people which is mostly confined to the western and southern districts of the state. The eastern districts of the state record either medium or low magnitude of economic development with fever exceptions. Social development of scheduled caste shows comparatively regular pattern. High magnitude of social development is confined mainly to the southern and eastern districts of the state, whereas, western districts are lagging behind in terms of social development. The overall development (socio-economic development) exhibits its high index in southern and in few western districts in the form of pockets of different sizes, whereas, the low level of socio-economic development is observed in north eastern districts in the form of a belt. The relationship between economic development and employment rate indicates that the districts of the combination of high level of scheduled caste employment with low level of economic development are concentrated in western part of the state. The districts with the combination of high employment rate with high economic development are widely spaced. Medium employment rate with low economic development is observed in a tiny pocket of three eastern districts. Medium level of employment force with medium level of economic development is observed in the eastern southern and central districts. Low employment region with high medium and low economic development is observed only in the western districts.

The spatial distribution of employment rate versus social development indicates that, the districts of high employment rate with high and medium social development are concentrated in the southern plateau districts of the state, the high level of scheduled caste employment rate with low level of

social development is observed in these eastern districts. The combination of medium level of employment rate with high social development is seen in the eastern districts. The combination of medium level of employment rate with medium level of social development is observed in majority of the central and south eastern districts. Low level of employment rate with low and medium level of social development is identified in the western districts of the study area.

Taking an overall view of the spatial pattern of development, it may be stated in general terms that the pattern of the development of scheduled caste people is uneven. The eastern and southern districts which are relatively less socio-economically developed, are providing better employment opportunities for the scheduled caste people. Majority of western districts are showing either medium or low level of scheduled caste employment rate with high, medium or low level of scheduled caste socio-economic development.

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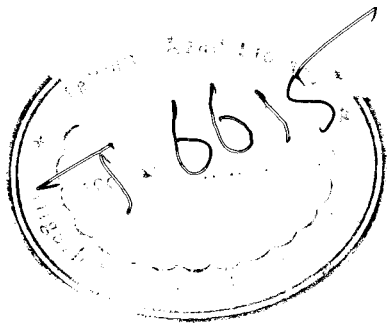

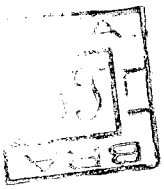

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CERTIFICATE

I certify that the Ph.D. thesis on ***'Regional Trends and Patterns of Employment of Scheduled Caste Population in Uttar Pradesh'*** has been completed by **Ms. Falak Butool** under my supervision and recommend that it may be forwarded to the examiner for evaluation.

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Falak Butool

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INTRODUCTION

Over the past few decades more and more geographers have crooked their thought to the study of population. Their curiosity as geographers has been first and foremost directed towards the analysis of areal variations in the distribution, structure and the ways in which these relate to nature of places. It may be assumed that the significance of population geography as a branch of geography has grown concurrently with an increasing conciousness of the dynamism of population as man is not only the utilizer of physical earth, but also the creator of cultural earth. Previously geographers were frequently satisfied to examine the patterns of population distribution as more or less static phenomena, relating them particularly to the patterns of physical environment.

Though, time to time the nature and scope of population geography has been changing around the globe due to change in the nature of population characteristics. But, still the subject matter and contents of population geography have been debatable. Nevertheless, human being has been considered the most important and well established core of population geography. Trewartha (1953) undisputedly occupies the most important place for initiating the development of this systematic branch of geography. While defining population geography, he stresses that its essence is laid in the understanding of regional differences over the earth covering the people. Such a contention of Trewartha is to be viewed in the context of population geography, the central theme of which is to understand the process of spatial organization wherein population forms the most dynamic element. Some other important foreign scholars in this field are Clark (1965), Zelensky (1966), Garneir (1966),Wood (1976), Peters and Laskin (1979) and Jones (1981). They contributed to this sub- field of geography by bringing out texts of the subject into their respective countries.

The development of geographical study of population started very late in India. Tracing its history, Gosal reveals that all the significant advancements in this field of geography has been started in 1960.[1]

Mehta's (1967) doctoral thesis of *"Bist Doab"* in Punjab and the work of Krishna (1968) based on the map prepared on the data on individual villages are very detailed studies in this area. A similar doctoral research work was carried out by Chandna in 1969. After a decade, a valuable doctoral research entitled, "Regional Analysis of the population of Uttar Pradesh" was produced by Siddiqui F.A. (1980). In the same decade Chandna (1989) has produced a full fledged book on scheduled caste of India entitled 'Spatial Dimensions of Scheduled Castes in India'.

Population Geography, an offshoot of human geography includes the elements of population; its distribution, growth, structure, composition, problems and policies in its horizon. In the present venture, the researcher is concerned with one of the most important components of population statistics i.e. employment structure. Employment is one of the most significant features of a population of a nation as it has multilateral involvement in the economic production and planning. It provides information about the human resources and the nature and extent of their utilization.[2] Employment has great subjective significance with growing emphasis on regional planning and regional approach to the population policy and utilization of human resources.[3] Employment is an important indicator of the economic composition of a region. The degree of employment or unemployment exerts its influence as one of the chief determinants of several socio-economic and demographic characteristics of the population.[4] The socio-economic development of any region is mainly related to degree of employment and the proportion of workers in different sectors of economy.[5] Employment refers to economic activities in which workers are differentiated.[6] It is, therefore, necessary to lay down some rational standard for judging as to what activities should constitute productive work and what degree of performance should be

required to qualify a person as worker. The varied physio-cultural and socio-economic background of a region encourages the people to get involved into various types of works. No single component of employment operates in isolation but in each part of the region various socio-cultural groups get involved into several works depending on the available resources.[7]

In the present study, trends and patterns of employment rate and structure of scheduled caste people are studied. The significance of selection of this social group can be ascertained from the fact that, they account for 20.14per cent of the total population of the state. Due to lack of education and poor socio-economic conditions, they start working at an early age of their lives. Their employment rate is comparatively high but they are mostly involved in either primary sector or in miscellaneous work in unorganized sectors which give lesser economic returns.[8&9]

No regional planning can be successful until serious efforts are taken on part of planners and policy makers for the upliftment of this social group.

At present, as we know, the government, irrespective of its socio-economic and political ideology is undertaking regional planning to optimize economic production and to minimize regional disparities leading to economic development.[10] Thus, the development of all the social groups including the scheduled caste people through regional planning can be helpful for attaining balanced regional development.

Origin of Scheduled Caste in India

According to *Rigveda* (one of the earliest literatures of Hindus) there were four *vernas* in ancient Hindu society. These were Brahmins, Kshatryas, Vashyas and shudras. The shudras lie at lowest rung of the caste system and were described as "The Servants of Others". This classification of the society was basically functional and occupational in nature and character.[11] Shudras were later named as scheduled caste by the Government of India Act, 1935. In 1936, the British Government issued an order, the "Government of India

Scheduled Caste Order", classifying certain castes, races and tribes as scheduled caste as categorized by Hutton, the census commissioner of India in 1931.[12]

By the passage of time, this caste system became so rigid that the upper caste people started exploiting the scheduled caste people by depriving them of many facilities. Having realized the intensity of tyranny some prominent Indian reformers like Raja Ram Mohan Roy, Pandit Eshwar Chand Vidhya Sagar, Dr. Bhim Rao Ambedkar and Mahatma Gandhi raised their voice and started working for the upliftment of this depressed section of the society. At the time of drafting of Indian Constitution, the Prime Minister Jawaharlal Nehru and the Chairman of the drafting committee Dr. B.R. Ambedkar, drew special attention to the scheduled caste communities. No doubt, the scheduled caste people have been oppressed and exploited for centuries in an unequal and caste hierarchical society and have remained under-privileged. It was after independence that scheduled caste people were given a constitutional status. Article 17 of the constitution stated that untouchability was a crime and should be abolished and its practice in any form was forbidden. The enforcement of any disability arising out of untouchability was to be treated as an offence punishable according to the law. The Untouchability Act, 1955 was a strong step in the direction of the upliftment of their status.[13] Articles 341 and 342 of the constitution of India provide that the government, by a public notification, may declare castes, races or tribes in relation to a particular state as scheduled castes and scheduled tribes. The Ministry of Home Affairs, Government of India by a public notification (SRO-2477A) declared sixty four castes that are socially and economically deprived as scheduled Caste in the entire state of Uttar Pradesh. After that two more castes (Gond and Kori) were also included in this group by "The Scheduled Caste and Scheduled Tribes (Amendment) Act, 1976".

Many efforts have been taken by the government of India for the upliftment of this socially deprived group. But, in spite of reservations given in the

employment and education sector, scheduled caste people are still engaged in traditionally fixed and ranked occupation, their choice being limited by the birth. By one reason or the other, the effect of all the governmental efforts seems to be neutral on scheduled caste people. It has been rightly observed in an article entitled as 'Is Positive Discrimination a Good Way to Aid Disadvantaged Ethnic Communities' published in the popular magazine 'Economic and Political Weekly' (2006), that reservation policies which are meant to serve under represented ethnic communities, to gain better access to social capital, like useful contacts and network that improve one's career opportunities are mainly benefiting the better off members of underrepresented ethnic communities.[15] The availability of voluminous census data regarding the underrepresented ethnic communities, like scheduled caste population and the government policies to ameliorate the social and economic status of this section of Indian society, seem to have stimulated many academicians to work upon various aspects (growth, sex composition, literacy, education, Employment etc) of scheduled castes population. Employment is a key input to socio-economic development of any region or any social community including the scheduled caste population. It is clear from the census data that, though larger of scheduled caste people are engaged in employment sector yet they are socio-economically back ward than the general population. Thus in the present doctoral work an attempt is made to map out the regional disparity which exists between different parts of the state of Uttar Pradesh resulting from variation in the rate and structure of employment of scheduled caste population. It is a well known fact that quantitative and qualitative measurement of workforce is an important parameter of all the economic efforts. A comprehensive regional analysis of occupational structure is necessary for rational planning and legitimate minimization of regional disparities to foster a healthy and balanced development.

The present work has been under taken with the following objectives

1. To show the trends and patterns of scheduled caste employment in Uttar Pradesh since 1971.
2. To compare the scheduled caste employment trends in Uttar Pradesh with the employment trend of total population of the state and scheduled caste population of the country.
3. To analyse the general patterns of scheduled caste employment at district level and to test differentials of employment rates (total, rural and urban) with various socio economic determinants.
4. To make a sector-wise analysis of scheduled caste employment i.e. major employment groups in the state and analyse separately the determinants which may influence the differentials of major employment groups.
5. To demarcate the employment and development regions and show as to how they are related with each other.

The whole study is divided into six chapters. The first chapter deals with the concept of employment given by various national and Inter national organizations, demographers, sociologists, economists, geographers and other concerned people. This chapter also deals with various determinants of employment, whereas the second chapter presents the research design and review of related literature in which methodology, tools of investigations and the related work of foreign as well as Indian researchers are highlighted. Third Chapter gives a detailed description of the study area. Fourth chapter examines the trends and patterns of scheduled caste employment. In which a comparative analysis of the trends of employment of scheduled caste population of the scheduled caste population is made with scheduled caste population of India and Uttar Pradesh. The fifth one explains the employment structure and employment regions of scheduled caste population and the sixth

chapter analyses the level of socio-economic development and employment rate verses socio-economic development regions. In the end conclusions and suggestions are given.

The present work "Regional Trends and Pattern of Employment of Scheduled Caste Population in Uttar Pradesh" is based on secondary data, collected from different published and unpublished sources at district level. Apart from the demographic data available from the census of India, Delhi, the relevant non - demographic data for the year 2001 pertaining to economic and social sectors have been obtained from the publication of the State Planning Institute, Lucknow and Ministry of Human Affairs, Govt. of India, New Delhi.

There are certain sound reasons for selecting Uttar Pradesh as the unit of analysis. First of all, Uttar Pradesh is the most populas state where scheduled caste account for 21.14 per cent of the total population. Secondly, it is one of the developing parts of India where different types of religious and caste communities in its boundaries. Uttar Pradesh inhabits the largest number of scheduled caste population in the nation. The state doesn't have sufficient mineral resources and here the base of the economy is mainly agriculture. Scheduled caste people being least skilled and uneducated, get employment in this sector easily. Other than this, the researcher herself belongs to Uttar Pradesh and knows about the physical and cultural set-up of the state. The administrative division of the state in the form of district is taken as a basic unit of analysis because most of the government data is available at this level

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CHAPTER 1

CONCEPTUAL FRAMEWORK

The term employment refers to holding of some post in office.[1] It implies the services of an individual regularly used for some payment. The employee in the employment is expected to provide services exclusively to his employer during the tenure of employment. The employment comprises of all persons including family workers who work during the time reference period, established for data on economic charter or who had a job in which they were temporarily absent because of illness or injury, industrial dispute, vacation, the leave of absence, absence without leave or temporary breakdown.[2]

There are so many literary terms such as manpower, labour force, labour supply, gainful workers, working population, economically active population, work participation rate and workforce, used for referring employment.

The term 'Manpower' means only those people who could participate in economic activities if there was a demand for them to do so. Economically active population is that part of manpower of both sexes which is actually engaged or attempt to engage itself in the production of economic goods and services.[3] According to multilingual demographic dictionary, the working population consists of those individuals who take part in the production of economic goods and services, including unpaid family workers in an economic enterprise as well as persons who work for pay or profit.[4] The term "Labour Force", however is defined as all persons classified as economically active, (ICSSR), those who actually supply efforts for the production of goods and services for exchange (the employed or the workers) and those who, though not working, want to do so or seek an opportunity to do so (the employed including new entrant into the labour force or persons who seek work for the first time.[5] It may also be defined, as a group of persons who are

working at a gainful occupation or waiting or seeking such work during a specific period preceding the inquiry.[6]

"Labour supply" is another term which is used by the economist to indicate the form of labour available at various wage rates.[7] The active population in generally accepted, official sense of the term, comprises of all those who are engaged in remunerative occupations and who seek a livelihood in such occupations. Thus the self employed workers as well as all types of wagers and salary earners and those who work without remuneration with a family are included in this group.[8] According to Trewartha, the total population of a country may be divided into two parts viz economically active and economically inactive. The economically active group is sometimes spoken of as a labour force or the working force. The term describes not only those men and women who are actually engaged in productive employment, but also those who may be temporarily unemployed. Included are employers, employees, the self employed, unpaid family workers, domestic servants and members of armed forces. On the other hand, the inactive group is composed of children, retired persons, students, housewives, inmates of institutions and those living on royalties, rents, pensions, dividends etc.[9]

The United Nations and ILO (International Labour Office) use the term 'Active Rate' for the concept of work participation rate. It is defined as that percentage of total population, which is economically active. It can be calculated separately for males and females, for each age group and for the region, province, state and individual area.[10] The United Nations considers that the work participation is made up of all the people of 14 years of age and over who, at particular moment, are either employed or unemployed but looking for work. The workers include farm labourers, physicians and the people who work for themselves as well as those who work for others people who work for salaries and for fees. The workers include armed forces except when the term civilian workers are used. Not considered in the workers are all

people under 14 years of age and all those 14 years of age and over who are doing only incidental unpaid family work (less than 15 hours during the particular week to which the data relates), the later group being mostly students, housewives, retired workers, seasonal workers, in an off season who were not looking for work, inmate of institution of persons who cannot work because of long term physical or mental illness or disability of these groups not in the workers.[11]The term labour force is equivalent to economically active population according to the terminology recommended by the United Nations. Similarly, the term working population is also equivalent to economically active population. In the recommendations made by the United Nations for conducting population census it has been classified as follows:

An economically active population comprises of all persons of either sex, who furnish the supply of labour available for the production of goods and services (during the time reference period chosen for the investigation). It includes both the persons in the civilian labour force and those serving in the armed force.[12]

All these terms are equivalent in the sense that all of them signify those individuals who are actually involved in productive works and in return they are getting financial assistance.

Indian Censuses

The information on economic activities of individuals was collected right from 1872 census, but the definition of employment had not been constant all through, from 1872 to 1981, the approach adopted has more or less been that of 'gainful workers'.

In the censuses of 1872 and 1881 only one question relating to occupation was asked from individuals and persons were classified accordingly under various occupations. The main economic question in the censuses from 1891 to 1921 was related to livelihood or occupation or 'means of subsistence' of

each worker. In actual practice, however, even persons who were not working but were receiving income from land, property etc were considered as economically active. Thus in 1901, 1911, and 1921 censuses, the population was divided into 'actual workers' and 'dependents'. The term 'actual workers' included all persons who actually did work or carried on business whether personally or by means of servants or who lived on house rent, pension, etc. The persons who were not 'actual workers' were 'dependents'. One of the main features of these censuses was the dichotomy of population into 'actual workers' and dependents.[13] In 1931, the population was first divided into three classes, namely, 'earner', 'working dependent' and 'non-working dependent'. An 'earner' was defined as a person with permanent and regular work for which return was obtained in cash or in kind which helped to augment the family income. A 'working dependent' was classified as a person who assisted with work of the family and contributed to its support without actually earning any wage. A 'non-working dependent' was one who did not work or had no occupation.

The concept of 'income' was specially introduced in 1931 and continued in 1941 and 1951 censuses. In 1941, each person was classified into three following categories; wholly dependent, partly dependent and independent workers. A person who had no income in cash or kind was 'wholly dependent'. A person who contributed in cash or kind towards the support of the household without being definitely capable of supporting himself was 'Partly dependent'. A person who was not dependent on any other person was an 'independent worker. In 1951, there was a further change and every person was labeled either as a 'self-supporting person' or 'earning dependent', and 'non-earning dependent'. A person who was in receipt of an income and that income was sufficient at least for his own maintenance (he or she as the case may be) was recoded as a 'supporting person'. Such income may be in cash or kind. Any one, who is not a 'self supporting person' in this sense, was a dependent. A dependent may be either an 'earning dependent' or a 'non-

earning dependent'. Where the income which he or she secured was not sufficient to support him or her, that person was an 'earning dependent'. A person who did not secure any income either in cash or kind was a 'non-earning dependent'.[14] During a decade or so, the concept changed further. However in 1961, economic data were collected on the basis of work. The population was divided into two classes, 'workers' and 'non-workers'. In the case of regular employment in any trade, profession, service, business or commerce, the basis for work would be satisfied if the person had been employed during any of the 15 days preceding the day on which he was enumerated. In the case of seasonal work like cultivation, livestock, dairying and household industry if a person had some regular work of more than one hour a day was to be regarded as a 'worker'. The term work included not only actual work but effective supervision and direction of work too. Persons who were not engaged in any economic activity were treated as 'non-workers'.[15]

In the 1971 census, the persons were categorized according to their main activity, into 'workers' and 'non-workers'. A 'worker' was defined as a person whose main activity was participation in any economically productive work by his physical or mental activity. 'Work' involved not only actual work but effective supervision and direction of work, where as a person who was basically a 'non-worker' such as a student, housewife, did make some marginal contribution to work.[16]

In 1981 census, the whole population was divided into three categories, viz., 'main workers', 'marginal workers' and 'non-workers and the same were adopted in 1991 census. Main worker was defined as a person whose main activity was participation in any economically productive work by his physical or mental activities and who had worked for 183 days or more. Work involved not only actual work but effective supervision and direction of work. Marginal worker was defined as a person whose main activity was participation in any economically productive work or his physical or mental

activities for less than 183 days. Non-worker was defined as a person who had not done any work at any time.[17]

According to 2001 census, work is defined as participation in any economically productive activity with or without compensation, wages or profit. Such participation may be physical or mental in nature. Work involves not only actual work but also includes effective supervision and direction of work. It includes part time help, unpaid work on farm, family enterprises in any other economic activity. All persons engaged in work as defined above are workers. Persons who are engaged in cultivation or milk production even solely for domestic consumption are also treated as workers.Reference period for determining a person as workers and non-workers is one year presiding the date of enumeration.[18]

Factors Determining Employment Force

The magnitude of working population in any area depends upon a variety of economic, demographic and social factors. . Demographically, the birth rate and consequent age structure, age at death or longevity of life and migration are significant. Economically, the type of economy, availability of employment opportunities and level of income are important. Socially the levels of literacy, size and type of family, age at marriage, status of women in the society and general health standards are vital.[19]

Demographic Differentials

The chief among the demographic differentials which play profound role in shaping the employment are, fertility, mortality and migration.[20]These are described one by one.

Fertility Differential

Countries like India lie in the latter part of early expanding stage of demographic transition, where around 20 per cent of the population (both total

population and scheduled caste population) lie in the age bracket of 0-6 years.[21 & 22] This means population is heavily loaded with the children who normally are non-workers and hence the proportion of workers in relation to non-workers of the total population in every social group is low.[23]

Age specific work participation in various occupations is another aspect of population structure which comes under the influence of fertility.[24] High employment rate of under 20's is comparatively higher in socially and culturally deprived segment of the population like scheduled caste. The people of this social group are bound to take up some gainful employment at an early age to supplement the meager amount of total family income.[25] A corollary to high employment rate of youngers is relatively predominant in miscellaneous and petty services and wage labourer in the overall occupational structure without any literacy requirement.[26]

Another important demographic factor to affect employment rate of the scheduled caste population is age and sex .In general, male employment rate is high both in the total population as well as in scheduled caste population. The male and female employment rate is quite striking in scheduled caste population though it is not so in case of total population. According to 2001 census, male and female differential in scheduled caste work force is 2.21:1 whereas, 2.78:1 in the case of non-scheduled caste population. The male dominated work force both among the male scheduled caste population and total population is attributable to the patriarchal system prevailing in the country for centuries throwing the responsibility of earning livelihood on the male shoulder. The relatively narrow range of male-female differential in the employment sectors of scheduled caste population is related to the harsh social and economic realities of their lives. It compels their women folk to join the males in economic struggle.

Mortality Differential

Employment rate also varies according to mortality rate. The decline in mortality rate affects the pattern of working life of population. The decline in mortality rates in the middle and older age groups remains substantial but much slower than for younger groups. These changes in the death rate bring about dramatic increase through out the entire economic age. Since all men from 20 to 65 normally work, the employment rate potential increases at most as much as the population through reduced mortality.[27] Lower mortality amongst the very young people may cause rejuvenation of a population. If the decline in mortality rates is more or less uniform at all the age levels, there will not be instantaneous aging or rejuvenation.

Mortality rates also have direct effect on the composition of population by economic status. If mortality rate in juvenile group is lower than fertility rate, the transference from young age group to work force slab will be large and this slab will consequently tend to grow in size. [28]

Migration

Migration is the third demographic factor which influences the proportion of employees in a population. Largely those people who migrate, lie under economically active age group. The areas of emigration have lower employment opportunities resulting into proportionally lower proportion of work force. The areas of immigration are characterized by influx of workers who display higher degree of working population. [29]

The structure of population by economic status and occupation also gets modified due to migration. In recipient areas of migration being strongly male selective, tend to swell the work force and change the existing occupational structure. At places where industrial development is in progress, the in migration has a favorable impact as it provides cheap labour which, when absorbed in the industry tends to change the occupational structure of the area

in favour of industry and in the long run also helps to diversify the economic activities. On the contrary, out migration from an area creates scarcity of labour supply with the consequence that marginal workers i.e. number of female workers juvenile and senile dependents tend to join the rank of workers. In remote areas of the state, the scheduled caste migration is mainly adult male selective, leaving the local economies in the hands of females and seniles. In the western Uttar Pradesh the emigration from the socio-economically back ward areas of the country of poor people of almost all the social group causes the lower proportion of scheduled wage workers in agriculture sector.[30]

Economic Differentials

Type of Economy

Among the economic determinants of employment, the type of economy of the area is significant. The nature of jobs available in the industrial societies is very much different form those available in agrarian economies. According to 2001 census, scheduled caste population is mostly engaged in the agricultural sector while the proportion of workers in the industrial sector and tertiary sector is less as they, on their end, have demands of skills and education which results into late entry of scheduled caste people in the job market. Thus this socially, culturally and economically disadvantaged group cannot afford to their late entry in the higher salary generating, secondary and tertiary occupations in towns and cities. In case of the less developed rural areas, education holds little functional value; here scheduled caste workers are involved in agriculture and minor miscellaneous services which do not require any special training or education.[31]The availability of employment opportunities is another significant economic determinant of the magnitude of employment in any area. The less developed regions where economy is not diversified, unemployment rate is high and the availability of lesser

employment opportunities for the multiplying manpower have relatively small employment rate in comparison to the more developed regions.

Level of Aspiration

Level of aspiration refers some times to the achievement of inspirational goals in specific spheres of activities like education, occupations and economic endeavors. Various attempts have been made by the government (especially after independence) to raise the level of aspiration of scheduled caste, which can motivate them to raise their educational status and to prepare them for more remunerative jobs.[32]

Level of Income

It is the level of income that largely determines the proportion of workers in total population. The social groups with low level of income are compelled to struggle for earning livelihood in larger proportion including females and children with a view to augment meager family's income.

Social Differentials

Various social determinants of employment are size of family, type of family, education and literacy. Among them education undoubtedly claims the highest rank.

Type of Family

The average size of family has its impact upon the incidence of employment rate. Smaller the size of family of scheduled caste people more and more freedom will be given to the daughter in law to participate in outdoor activities.[40] Thus smaller families push up a considerably good proportion of female workers in the society who do not suffer from any kind of inhibition against female employment as much as in traditional joint families.[34]

Age at Marriage

The age at marriage influences the incidence of employment in its own way. In the societies where early marriages are too common, the proportion of workers, other things being equal, is relatively high. It is because the family responsibilities create an urge for getting engaged into economically gainful activities at an early age.[35]

In scheduled caste population the age of marriage is low.[36] Thus, higher employment rate of scheduled caste population can be considered to be associated with the low age at marriage time.

Level of Literacy and Education

It is found that level of education and nature of employment are closely associated.[37] Though Government incentives in the form of reservation in educational sectors with fiscal gains up to certain extent have proved beneficial to bring scheduled caste children in school and colleges yet the results of these governmental efforts are not satisfactory. It can be visualized in the light of the census data of 2001 on literacy. This shows that literacy rate of the state on the whole is 56.3 per cent, whereas, for the scheduled caste population it is still 46.3 per cent. Low education of scheduled caste people augmented with poverty and traditional social system, force them to continue their traditional employment from the childhood.[38] It is found that in all the social groups, males are more literate than the females because of low status of females, their low mobility, lower freedom, early marriage and large amount of domestic work which provides lesser freedom to females for formal schooling. Moreover, female education in rural areas does not get social approval. Thus the women constituting almost half sphere of the population are proportionally lesser in the orbit of skilled worker's group. It would be of some worth to examine the role of education in the employment structure of the scheduled caste population. Although such data as concerning

the employment structure of the literate scheduled caste persons are not available, yet keeping in view the requirements of various occupations it can be inferred that most of the literate scheduled caste workers are engaged in non agricultural pursuits including household industry, non household industry and other services. This would also indicate that education holds the key role to social and economic uplift of the scheduled caste persons. It is observed that education has helped in employment mobility. After getting education, people are able to get respectable and even highly paid jobs. Lack of education inhibits people from mobility of any kind. Education is a vital factor in the social transformation of a society and its economic amelioration.[39]

General Health Conditions and Longevity

General standard of health of the people, being an index of their vitality also influences the participation rate of population in economic activities. It is generally observed that good health not only increases the efficiency of workers but also increases the tenure of working life. It is expected that social groups with good general health conditions show a higher participation rate than a social group with poor health conditions.

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CHAPTER 2

RESEARCH DESIGN AND REVIEW OF LITERATURE

Methodology

In the present study, scheduled caste population of Uttar Pradesh has been selected for an enquiry into the trends and patterns of employment of scheduled caste population in Uttar Pradesh. All the seventy districts have been made the basis of the analysis of regional patterns of scheduled caste employment rate levels of socio-economic development.

Objectives

The present work has been under taken with the following objectives.

1. To show the trends and patterns of scheduled caste employment in Uttar Pradesh since 1971.
2. To compare the scheduled caste employment trends in Uttar Pradesh with the employment trend of total population of the state and scheduled caste population of the country.
3. To analyse the general patterns of scheduled caste employment at district level and to test differentials of employment rates (total, rural and urban) with various socio economic determinants.
4. To make a sector-wise analysis of scheduled caste employment i.e. major employment groups in the state and analyse separately the determinants which may influence the differentials of major employment groups.
5. To demarcate the employment and development regions and show as to how they are related with each other.

Data Base

The entire study is based on secondary data, collected from different published and unpublished sources at districts level. Apart from the demographic data available from the Census of India, New Delhi, the relevant non-demographic data for the year 2001 pertaining to economic and social sectors have been obtained from the publication of the State Planning Institute, Lucknow and Ministry of Human Affairs, Govt. of India, New Delhi.

Study Area and Unit of Analysis

In the present study, the state of Uttar Pradesh is selected to enquire into the trends and patterns of scheduled caste employment. The administrative division of the state in the form of district is taken as a basic unit of analysis as most of the government data is available at this level. The number of districts of the study area is continuously increasing since the year 1971 (the year from which investigation has started. In the census year 1971, total districts were fifty four which increased to fifty six in next census year (1981) after that it further increased to sixty three in the year 1991 and finally it reached to seventy in the census year 2001. So far the area of Uttar Pradesh is concerned, it was 241,56,283 Km^2 uptil 1991, but remained only 240,92,800 Km^2 in 2001 due to the separation of northern mountainous region in the form of a separate state i.e., Uttarakhand.

Selection of Indicators

While dealing with the current problem, the selection of indicators constitutes the crux of methodology. It should be chosen in a way that is relevant to the nature of problem and easily available at different points of time. The indicators are not merely statistics, pure and simple, but the information both statistical and non statistical, which is transformed into indices for measuring the relationship between one and more sets of facts under an adopted

theoretical assumption. Rao has observed that economic and social indicators are not simply statistics and statistics are not *'ipso facto'* indicators unless some theory or assumption make them so by relating the indicator variable as a phenomenon, what is what it directly and fully measures.[1] Use of indicator is highly common and important in statistical analysis of problems of almost all the major disciplines of knowledge.[2] The importance of indicator can play pivotal role in the development of planning in two ways. Firstly they can help to analyse to preplan socio-economic conditions and secondly they can assist in monitoring progress towards the formulation of policy and programmes and the selection of priority areas. Therefore, an attempt has been made to select a set of socio-economic indicators suitable for the purpose of showing regional disparities in the existence of scheduled caste employment in Uttar Pradesh. However it may be mentioned here that most of economic indicators are only available for the total population of the state. Scheduled caste economic conditions are assessed with these indicators only whereas the most of indicators of social conditions are also available for the scheduled caste population also. These indicators are enlisted below.

Table2.1 List of Selected Independent Variables 2001

Category	Variables	Definition
Demographic	X_1	Growth Rate of Scheduled Caste Population
	X_2	Density of Scheduled Caste Population
	X_3	Percentage of Scheduled Caste Population to the Total Population
	X_4	Sex Ratio of Scheduled Caste Population
Economic	X_5	Per Capita Net Sown Area
	X_6	Cropping Intensity
	X_7	Net Sown Area to the Total Cultivated Area
	X_8	Percentage of Net irrigated Area.
	X_9	Irrigation Intensity
	X_{10}	Number of Working Industrial Units Per Lakh Population

Table 2.1 (Continued)

	X_{11}	Number of Persons Engaged in Registered Factories Per Lakh Population
	X_{12}	Per cent of Scheduled Caste Urban Population
	X_{13}	Per Capita Income
	X_{14}	Total Employment Rate of Scheduled Caste Population
	X_{15}	Rural Employment Rate of Scheduled Caste Population
	X_{16}	Urban Employment Rate of Scheduled Caste Population
Social	X_{17}	Literacy Rate of Scheduled Caste Population
	X_{18}	Number of Junior Basics Schools per Lakh Population
	X_{19}	Number of Senior Basic Schools per Lakh Population
	X_{20}	Number of Higher Secondary Schools per Lakh Population
	X_{21}	Junior Basic School's Teacher Student Ratio
	X_{22}	Senior Basic School's Teacher Student Ratio
	X_{23}	Higher Secondary School's Teacher Student Ratio
	X_{24}	Number of Hospitals per Lakh Population
	X_{25}	Number of Beds Per Lakh Population
	X_{26}	Number of Primary Health Care Centers Per Lakh Population
	X_{27}	Length of the Metalled Road Per Thousand Square Kilometers
	X_{28}	Percentage of Electrified Villages to the Total Inhabited Villages

One thing needs to be mention here is that the indicators from X_5 to X_{16} are considered as economic indicators whereas rest of the selected indicators i.e., from X_1 toX_4 and then X_{17} onwards are considered as social indicators.

Techniques Applied

For the analysis of data various statistical methods have been used, e.g., simple percentage method, Karl Pearson's Correlation Co-efficient (r), Student 't'test, Factor Analysis Location Quotient and Standard Score Additive Model also known as Z-Score which are discussed below in detail.

Simple Percentage Method

This method is mainly used for obtaining employment rates from the absolute figure of workers. On the basis of which trends and patterns of employment are obtained. This calculation has also provided the base for the application of higher statistical techniques like Karl Pearson's Correlation Co-efficient (r), Student 't'test, Factor Analysis Location Quotient and Z- score.

$$s.\,p = (n^{th}/n)\,100$$

Where,

s. p = simple percentage.

n = the numerical value of the whole commodity

n^{th} = the part of that commodity n.

Correlation Analysis

Correlation is a statistical technique used for finding relationship between two variables. Here these variables are employment and its determinants. The correlation coefficient is either +1 or -1 in condition when all actual values are on the regression line, prediction is exact and relationship between the two variables is perfect. When it is not so then the relationship between the variables is not perfect. In such situations, the correlation coefficient is between – 1 and + 1.[3]

Multiple Correlation Coefficients

The multiple correlation co-efficient is a useful measure to depict how well an estimated regression fits the observed yi. It measures the degree of joint linear association among all the variables both dependent and independent. It is

always greater than any simple correlation expressing the degree of linear association between the dependent variable Y and any of the independent variable the (X's). The multiple correlation (r) based on Karl Pearson's method is given below:

$$r = \frac{\Sigma xy - \Sigma x \Sigma y / n}{\sqrt{\Sigma x^2 - \frac{(\Sigma x^2)}{N}} \sqrt{\Sigma y^2 - \left(\frac{\Sigma y^2}{N}\right)}}$$

Where,

r = co-efficient of correlation

x, y = the two given variables

n = Number of observation

Student t-test

For analyzing the present data, correlation matrix has been used to assess the relationship between explanatory variables, and employment structure of scheduled caste population. The interrelationship of variables selected for the analysis of employment structure of scheduled caste population is primarily based on 31X70 correlation matrix. The correlation co-efficient is computed between the socio-economic determinants and employment structure, and the t-test is applied to find out the determinants which are significant at 1 per cent and 5 per cent level of significance. The formula of the student t test is given below.

$$t = r\sqrt{\frac{(n-2)}{1-r^2}}$$

Where,

t = calculated value of 't' in the test of significance,

n = number of observations,

r = computed value of coefficient correlation

Factor Analysis

Factor analysis is a technique which is helpful in dealing with large statistical aggregate, described by a number of variables. It helps in understanding the interrelationship between the variables. This technique reduces the original set of variables into smaller number of factors. It works on the assumption that the certain underlying factors common to the variables which are made up broadly of two parts, one is the general or common factor involved in each variable; the other is the unique factor involved in each variable. The unique factor indicates the extent to which correlations with other variables in the set do not count for the total variance of the variables. The common variables have been calculated for all the districts of Uttar Pradesh. They have been drawn from a component analysis of common variations of the set of thirty one variables relating to the characteristics of seventy districts of the state.[4]

In short, factor analysis is a multivariate statistical technique in which, sets of original unique data are replaced by a smaller number of sets of the determinants, which are significant at 1 per cent and 5 per cent levels of confidence.

Location Quotient

It provides an index of surplus and deficit in workers with reference to state average workers. The location quotients of the districts of Uttar Pradesh, each of which compares the ratio of the district share of workers to its share of all work force with the similar ratio for all districts combined.[6] Therefore, it is a ratio of ratio.[7] The operational equation used for the deviation of location quotients reads as:

LQ di = MD / OD

Where, L.Q. is the location quotient for work force i, in district d,

M.D. is the percentage of work force M in all districts D

O.D. is the percentage of work force O in the state D.

Location quotient, however, has certain limitations. It can be used for intra-occupational and inter-occupational comparisons between the districts, but not for inter-occupational comparisons within a district.[8] In inter districts or inter regional comparisons, if a district or region obtains a location quotient exceeding 1.00 it is considered as more than its share whereas if it obtains a quotient of less than 1.00 (the quotient can never be less than zero) it is taken as having less than its share. These two categories are also termed as over represented and under represented respectively. [9]

Z- Score Technique

In order to reach standardization, the raw data for each variable has been computed into standard score. It is commonly known as Z value or 'Z' score. The scores measure the departure of individual observation from the arithmetic mean of all observations; expressed in comparable form. This means it becomes a linear transformation of original data and this method was first used by Smith in 1968 in his study on inequality in Peru followed by D. Smith (1973) and D. Slater (1975). The formula is:

$$Z_i = \frac{X_i - \bar{X}}{SD}$$

Where,

Zi is the Standard Score,

Xi is the original or individual values for observation i,

$\bar{X}$ is the mean for the variable, and

SD is the standard deviation

The standard score additive model has been used to develop a composite economic and social indicators for each set of variables, and a general indicator including all criteria and variables.

For this purpose twelve economic indicators and sixteen social indicators require the addition of Z score for the individual variables taken to measure them. The model is thus:

$$I_j = \sum_{i=1}^{K} Z_{ij}k$$

Where, I_j is the magnitude of indicator for district j,

Z_{ij} is the standard score of variable i in the district j,

K is the number of variables measuring the criteria in question. [5]

Districts scores on different indicators can thus be directly compared, irrespective of the number of variables contributing to them. The overall general indicator of social and economic inequality (SEI) for any district will be

$$SEI_j = \sum_{i=1}^{m} \text{, or in this case}$$

$$SEI_j = \sum_{i=1}^{70} Z_{ij},$$

Again these results can be transformed back into Z score, so that zero indicates average performance and unity (+or -) represents one standard deviation in either direction. plus (+) and minus (-) indicating high and low values respectively.

Cartographic Techniques

Advanced cartographic techniques and GIS-Arc View (Version 3.1) programmes have been adopted to represent the regional disparities of

employment rate and levels of socio-economic development among the districts of the state through maps. Besides these, other cartographic techniques used in the present doctoral work are line graph and bar graph. Line graph is a statistical technique used to show the trend of employment rate of scheduled caste population of the state and its comparison with the employment rate of total population of the study area and scheduled caste population of India. This line graph and bar graph also helps in giving legitimate references to past trends and to elucidate variation and change.

Review of Literature

It would not be out of place to mention certain popular research papers which have contributed immensely to the present doctoral thesis through their significant findings.

Related Work Done Abroad

Employment, one of the most important indicators of socio economic development of any region is continuously studied all over the world to assess the level of development in various countries. ILO and UNO through their recommendations have placed importance to the assessment of labour force which in turn leads to the development of the nation. The contributions of few foreign researchers in this field are mentioned below.

Hauser (1956) pointed out that there are a number of aspects of labour force which merit the special attention of the sociologist. First, because of the significant way in labour force data, broadly conceived can illuminated other cultural, institutional and personal phenomena. Besides it the contribution of sociologist can make better understanding of labour force, structure, process and problem.[10]

Wolfbin and Jaffe (1956) attempted to assess the relative importance of demographic factor in the changing size and composition of labour force over

a span of time. More specifically, how important have changes in age-sex, marital status, colour and nativity been with relation to changes in the rate of labour force participation.[11] Soloman (1962) used location coefficient method. He hypothesized that an ideal distribution of occupation in a region, workforce should bear the same ratio with the natural distribution of these occupation as does the region's work force with national workforce. If a region consists of ten per cent of total national workforce then the distribution of various occupations in this region should also be reckoned as a strong hold of agricultural occupation as compared with the nation.[12]

Wabe (1969) highlighted mainly the causes of variations in labour participation during the period of 1951-61. In the study the multiple regression analysis is applied to measure the impact of selected factors on labour participation rate.[13] Roger (1979) examined the determinants of labour shields for few communities and analysed comparability of several geographical and socio-economic characteristics of workers hired by pulp and paper mills recently established in north central British Columbia. The high employment rates experienced by North Central British Columbia in recent years will increase provincial government interest in manpower planning for future industrial development in the region. In this regard, it might be remarked that large scale expansions of pulp and paper industries are possible and infact are expected in north central British Columbia.[14] Alexander and Dawson (1979) examined the nature of the broad structural change within the industry, and also investigate their spatial consequences through the case study of employment generation within a system of sub-urban retail centers in Canberra, Australia. It is analysed that evolution of sub-urban centers particularly those of aregional variety has an important and enriching impact on the sub-urban labour market.[15]

Whitelegg (1981) attempted to correlate the three contexts of higher education in each country and labour market for highly qualified people. All three

countries are experiencing some degree of economic difficulty with the result that mismatched in the supply and demand for geography graduate are emerging in each case.[16] Ahnstrom (1982) has shown a new tendency in the regional development of the working population of the Stockholm region in 1970's, as an outcome of changes taking place much earlier change that can unfold by means of a disaggregation of the economically active population and by analysis of the constituent industries. The decade of 1970's undoubtedly brought about changes in many factors which effect the regional distribution of various types of activities e.g. stagnation in the growth of industrial production which has impaired the economy the economic means for further employment growth of public services in least central and least urban parts of the country.[17]

Green and Owen (1985) have attempted to study the spatial division of labour in Britain, through an investigation of changing structure of employment in the manufacturing sectors between 1971 and 1981. Data on the socio-economic composition of population employed in manufacturing from the small area statistics of the censuses of population for 1971-1981 are used to measure the impact of these processes at the local labour market area (L.L.M.A) scale, and to draw a fruitful conclusion for the future employment prospects of different parts of Great Britain.[18] Crush (1986) analysed that the South African gold mining industry has traditionally drawn its migrant labour force from the variety of domestic and foreign labour savior. Since 1970 the migrant labour system has undergone propounded change with considerable social and economic implications for foreign workers in their home communities and their governments.[19]

Nurul (1987) through his work pointed out that the female employment rate in informal sector appears to be very low in Dhaka. The major informal occupation sector in which women participate is construction, where they account for twenty percent of the total working females. But out of the total

sample of 337 'location specific enterprises' only three were headed by women.[20] Naylor (1994) in his study investigates the welfare of women engaged in agricultural activities in Java. The analysis focuses specifically on the major rice-producing region of Java where women are employed extensively both as hired and unpaid family labour. Within the rice sector, a wide range of labour hiring and payment practices have traditionally determined the employment and wage levels of unskilled women. These practices include deferred payment for preharvest tasks, unpaid labour exchange among households, and piece work, labour contracts.[21]

Khalid (1996) analysed the sector-wise and spatial pattern of working force in Iran and tried to find out structural shift in this context. The study was carried out to province level and it covers three points of time, 1976, 1986 and 1991. The index of structural change was used to work out structural transformation of working force over time. It is found that the diversification of the Iranian economy since 1976 has resulted in structural change in working force over time. On the whole the pattern of change of working force is towards tertiary sector rather than secondary sector of economy.[22]

It is inferred from the work of Jou-Jou Chu (2000) that late 1980's of Taiwanese society had bred a sizeable aggregate of new labour market entrants. This group of labour market entrants was mostly engaged in lower level administrative jobs in the finance, insurance and banking sectors. Here the determinant that made these lower level white collar employees stand out as the paragon of the new working class instead of the model of the new middle class, was their active participation in union action to protect their rights and interests. He presented a clear picture of social and political traits of the new working class in Taiwan through this article.[23]

Johnson-Webb (2002) examined that the North Carolina Hispanic population has grown at a rapid rate in recent years. Before 1980, the majority of Hispanics in North Carolina were engaged in primarily in-migrant agricultural

work. Hispanics who are part of the new influx are arriving in urban areas and are working in non agricultural persuits. Labour migration occurs in response to demand for labour, and labour demand is mediated by employer's preferences and hiring practices.[24]

Edward L. Jackie Wiez (2003) is meant to study the social space of self employment in Havana, Cuba. This is to uncover the deeply conflicting and contradictory values that comprise the diatecties of state-society relations. Through detailed research into one form of self-employment; Paladares (small in home restaurants), this article also examined that how paladares have come to reflect the struggle for society and state to mediatwe the multitude of external and internal pressure amongst the current geopolitical climate. Using interviews conducted during several visits in 1999 and 2000, he demonstrated that paladares do not necessarily represent a capitalist tradition.[25]

Related work in India

Indian researchers had laid emphasis in this field mainly after independence. This was the period when the need of socio economic development was realized. Consequently various government and non government bodies became active to collect a comprehensive data on this aspect of population. Now the slogan of regional planning and regional development has fetch the attention of researchers of various disciplines (sociology, demography and economics) to study the various aspects of the employment of all social groups including the scheduled caste population. Here the contributions of few Indian researchers of the same field are highlighted.

Hullur (1973) discussed the distribution pattern of persons engaged in transport and communication in Mysore state and concluded a positive relationship between percentage of workers in this category and the degree of urbanization. A negative, though fable relationship was discovered between percentage of workers in this category and percentage of workers in the total

population. It means that majority of the workers are engaged in tertiary economic sector which is enhancing the rate of urbanization.[26]

Krishan and Chandna (1974), made a detailed study of Haryana's working force and its occupational structure and observed that Haryana had the lowest proportion of workers in the country due to a very high proportion of children between 0-14 age groups. Two third of its working force is dependent directly on agriculture. Some shift from agricultural to non-agricultural activity was observed in the densely populated and more urbanized parts of the state.[27] Vishwanath (1974) in his study observed that the state-wise women were employed more in primary sector in rural areas and in tertiary sector in urban areas. The proportion of female workers in secondary activities was low in both rural and urban areas.[28]

Rafiullah and Siddiqui (1981) observed that the analysis of occupational composition of the population formed an important foundation for the social stratification of a society. In this paper authors have given a detailed account of analysis and correlates of occupation regions of Uttar Pradesh. The occupational composition is one of the most effective indicators of the level of economic development particularly for those areas which are facing economic and population problems.[29]

One of the most important contributions in this field is made by Gosal (1991). He observed that majority of scheduled caste people are employed in primary economic sector both at the national level as well as in the state of Uttar Pradesh. Scheduled caste female employment rate is more than the employment rate of general females both at the national level as well as at state level. This is an outcome of poor socio-economic status which compels the scheduled caste female to join economic struggle. Percentage of scheduled caste workforce is more than that of the work force of general population. It is actually the result of comparatively larger proportion of females and children in the employment sector. The rate of employment of scheduled caste people

is low both in eastern and western Uttar Pradesh as compared to the peninsular India. In western Uttar Pradesh, strong taboos against female participation in outdoor activities lead to the overall low percentage of workers. In the eastern Uttar Pradesh lack of avenues of employment, poor resources and out migration, exploitation of the weaker sections of the population by the mighty landlords causes the low proportion of workers among the scheduled caste people.[30]

Kailash in (1993) assessed that economic progress implied an abundance of goods and services for the economic and social welfare of the people. The value of goods and services in any country increases through the trained and skilled manpower equipped with the modern technological base. Developed countries have acquired high per capita income with very insignificant proportion of labour force in agriculture and high percentage of labour force in manufacturing and service sector. On the contrary, in developing countries like India, engagement of labour force in agriculture is higher than rest of the two sectors. Since long back it has been experienced that the agricultural sector in India is overpopulated, with low labour productivity and disguised unemployment. Moreover, the growing share of agriculture over the years also apprehended the problem of unemployment. The secondary and tertiary sectors have failed to register significant labour force diversification even after four decades of our planned efforts. However, the structural changes have enhanced the volume of production and the variety of goods and services with the investment of huge amounts on the up gradation of technical know how and human resource development over a period of time.[31]

Tripathi (1999) stated that the inherent problems of scheduled caste are poverty, ignorance, lack of options in employment opportunities and non-existence of organization which can fight for their right and facilitate the continuance of age old exploitations. The involvement of scheduled caste people is more in primary sector than the involvement of general population.

Majority of scheduled caste people do not hold productive assets or land and constitute the bulk of agricultural workers and work in the unorganized or informal sector. They do not come under the perview of the protective laws like Minimum Wages Act and Prevention of Land Alienation Act.[32]

Tiwari (1999) observed that around 37 per cent of the total scheduled caste people are working which is equal to the general workforce in Jharkhand. Among the scheduled caste people main workers account for 32.3 per cent whereas marginal workers account for 4.7 per cent of total workers. Sex ratio of workers reveals that job opportunity among females should be enhanced in six districts of Jharkhand where sex ratio is lower than the average.[33]

Shafiqullah and Siddiqui (2001) observed that workforce and level of socio-economic development are interrelated; they depend upon each other and also affect each other. The test of simple linear correlation analyses that urbanization, agriculture, industrialization, literacy rate and medical amenities are the chief variables which have substantial impact on the distribution of workforce, and they have handsome share in the levels of socio-economic development of the state.[34]

Khan and Shafiqullah (2001) explain that high rate of male work participation is found in more developed western districts of Uttar Pradesh. They are generally working in urban areas. Female work participation rate is comparatively low in eastern districts.[35]

Mohammad (2001) has studied that in spite of all privileges and constitutional securities, development and modernization, scheduled caste people still continue to be in the same occupation. They being poor and down trodden, flock for their livelihood all around, and wherever any occupation is available they are permitted to do so. They work as agricultural labour in rural areas or as labourer in construction and manufacturing in towns and cities. He has also explained that small as well as marginal farmers among them have got land

under land ceiling act. They are putting all their financial and manual resource on it but due to low yield a time is likely to come very soon when they will return back to labour and service.[36]

Laletha (2002) presented a detailed analysis of the functioning of unorganized manufacturing sector of industrially developed state of Gujarat. The employment in this sector has increased from 700000 in 1978-79 to 1814561 in 1994-95. He analysed that the employment in urban areas grew at the higher rate than in rural areas.[37]

Siddiqui and Naseer (2004) observes that the level of educational development and employment provide information about the quality of human resource and the nature as well as the extent of their utilization. Within the western Uttar Pradesh, peoples in primary sector increase from west (more developed) to the east (less developed), while in the secondary economic sector, the situation is reverse. People's participation in the secondary sector decreases from west to east in the western Uttar Pradesh. Thus, it can be safely said that the types of employment is an index of development.[38]

Malhotra and Sharma (2005) found that the basic objective of economic reforms in India is to attain high and sustained growth of output and employment raising efficiency and competitiveness of Indian economy. But in terms of employment growth, the performance of Indian economy during the post reform period is decimal. Unemployment has increased in size as well as in rate of growth. As per 55th round of NSSO (1999-2000) the number of employed males in urban India is 942 per thousand which is higher than employed males in rural India, i.e. 897 per thousand and the number of urban employed female, 791 per thousand (1999-2000) is also higher than rural employed female, i.e. 676 per thousand (1999-2000). The number of urban unemployed male is 53 per thousand and that of rural unemployed female is 41 per thousand (1999-2000) which again is higher than urban female unemployed, that was 22 per thousand in 1999-2000).[39]

Hirway (2005) observed that the recently drafted unorganized sector workers social security bill proposes a universal coverage for the unorganized workers which is a welcome step to improve the socio-economic status of all the poor workers including the scheduled caste workers.[40]

Kapoor (2006) found that the females from socially deprived group such as scheduled caste, scheduled tribe and muslims very actively participate in both domestic and marketed work, though they are not well-educated and trained for highly paid skilled jobs. Their poor socio-economic and demographic conditions, poverty and illiteracy force them to join labour market. Basically they are more and more engaged in marginal and sub-marginal works. It is generally found that there is no taboo against women working outside the home in the scheduled caste and scheduled tribe population groups and in rural agricultural families.[41]

Chaundhary (2007) observed that the share of national capital in Gross Domestic Product and contribution to employment generation has increased over the time in all the states of India. Rising urbanization process has increased the employment more in service sector especially in urban areas. Female employment in the service sector is rising at the higher rate than male.[42]

Khan and Mustaquim (2007) studied that the share of rural female main workers in non agricultural sector is higher than the agricultural sector in West Bengal. In the northern plain districts the percentage of agricultural female workers are high whereas non agricultural female workers are high in southern districts. Socio-economic status of rural female main workers is high in districts where majority of them are engaged in non agricultural persuits.[43]

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CHAPTER 3

THE STUDY AREA

Uttar Pradesh is a heartland state lying between 23° 52' and 31° 28' North latitudes and 77° 4' and 84° 38' East longitudes. It is bounded by Nepal and Uttarakhand in the north, Himachal Pradesh in the north west, Haryana and Delhi in the west, Rajasthan in the south west, Madhya Pradesh and Chattisgarh in the south and Bihar and Jharkhand in the east. Thus, it is surrounded by nine states from all the sides.

Uttar Pradesh is the fifth largest state in India in terms of area, while in terms of population it ranks first. According to 2001 census, the total area of the state is 240,92,800 sq Kms and the state has been divided into seventy districts which form 7.6 per cent of India's total area and a population of 166.63 million i.e. (16.15 per cent of the national population).With such a large segment of the population of India living within its boundaries, economic development of Uttar Pradesh assumes special significance. By the sheer weight of its population, economic growth in this region would naturally affect the average level of living of the country as a whole.[1&2]

Physiographic Personality

Physically and geologically the state can be divided into two distinct regions i. The Ganga plain ii. Southern plateau and hill region.

The Ganga Plain

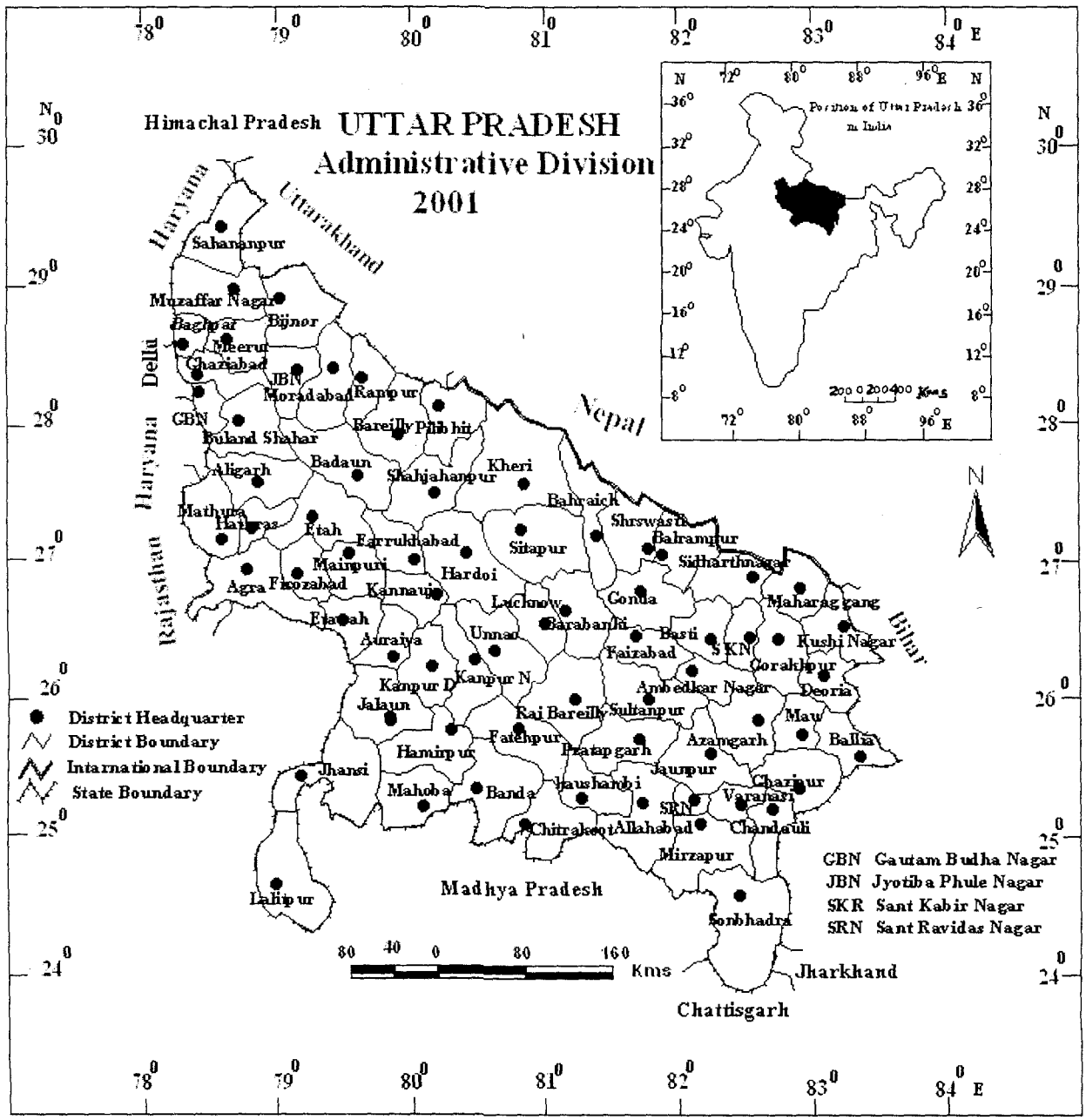
The great Ganga plain is built up of the detritus from the Himalayas and is traversed by the rivers Yamuna, Ganga and Ghaghara which are almost parallel to each other. The northern part of the Ganga Plain, which borders the Himalayas is known as *Bhabhar* which is the piedmont zone skirting the Siwalik and is mainly occupied by the districts of Saharanpur, Bijnor, Pilibhit and Gorakhpur. In this area the rivers suddenly flatten and deposit the coarse boulders and gravels brought by them from their upper reaches. A large

portion of the *Bhabhar* is covered with forests. Below the *Bhabhar* is a wider strip of land called the *Tarai,* a damp marshy tract, most part of which is covered with thick jungles and tall grasses. It was originally about 80 to 96 kms (Kilometers) broad but its width has been greatly diminished by the steady process of settlement and reclamation. The true *Tarai* is now confined to narrow strip parallel to the Bhabhar which falls in the districts of Saharanpur, Bijnor, Rampur, Basti, Sidharthnagar, Maharajgang, Gorakhpur and Deoria. The Bhabhar and Tarai belts are important for the cultivation of rice, wheat and sugarcane.

The Ganga plain is mostly an alluvial tract of Pleistocene ice age and recent deposits of clay and sand. The entire plain slopes generally from north-west to south-east. Since the land in this region is very fertile and climatic conditions favourable for agriculture. Thus it is the most populated area of the country. However, because of the thick alluvium strata this region practically does not have any mineral which partly account for the very significant industrial development. This has resulted in a heavy pressure of population on land which is the most serious problem of this region. Though a great variety of crops are grown throughout the plain but the chief crops are wheat, rice, barley, millets, gram and sugarcane.

Plateau and Hill Region

In the southwestern and the south eastern parts of the state there are two small tracts of plateau which differ considerably from the plain in topographic details. This region is oldest and most stable land mass which has rocks of diversified origins. The eastern part of the plateau region belongs to the Vindhyan System, whereas the western part comprises rocky highland plateau (Bundelkhand region). The former is composed of sedimentary rocks while the latter is mainly composed of Bundelkhand granite. The whole region is mainly composed of six districts namely, Jhansi, Lalitpur, Jalaun, Hamirpur, Banda and Sonbhadra.



Source; Census of India

Fig3l

This region lies at a height of about 300 meters and the land is not very suitable for agriculture due to its configuration. However, Jowar, gram and wheat are cultivated on about fifty percent of the area but the yield is much below the normal. This region is peculiarly liable to suffer from either an excess or deficiency of rainfall, thus its land productivity is lowest in the entire state.

Drainage

The drainage of Uttar Pradesh comprises of a number of rivers and their tributaries. In the north and northeast, the state is drained by the rivers; Ganga and Yamuna and their tributaries. Ganga is the chief river of the state and rests are its tributaries. Yamuna itself is the major tributary of Ganga. Both the rivers flow from west to east. The tributaries of Ganga are Ghaghra, Sarda, Sarju, Rapti, Gomti and Ramganga; all of these emerge from Himalayas except Gomti. The river Gomti rises from about 3 km east of Pilibhit at 200 meters elevation. The river Gomti and Ghaghra are often in flood during the rainy season and cause serious damage to human life, livestock and property. Ganga, Yamuna and Ghaghra are used for navigation for long distances mainly for local traffic. In the Southwest the drainage is through the rivers Chambal, Sindh, Betwa, Ken and Son, all of which join the Ganga and its tributaries. The Himalayan Rivers are more active than those coming from the Vindhyan range and filling up the great plain with silt. The flow of these rivers is from north to south in plains; thereafter they change their courses from northwest to southeast. They also provide more important source of irrigation and power since they have perennial supplies of water from monsoon rainfall supplemented by snow melt of Himalayas.

Soils

The soils of Uttar Pradesh may be broadly and conveniently studied in terms of physiographic regions of the state. The soils of Ganga Plain are mostly of

alluvial type which consists of *Bhangar* and *Khadar*. The former is composed of thick clay beds which usually replete with *Kankar* and form higher ground and is dark in colour; whereas the latter is mainly composed of fine silt and forms the flood plain which are adjacent to the rivers. The soils are thick and very fertile in the western section of the plain. Central part of the plain is composed of loam or sandy loam. The northeastern area of central plain has loam or sandy loam variety, while in rest of the area they are mostly sandy loam. Bhangar, Bhat and Bhur soils are found in the eastern plains. Patches of *Usar* soil are found scattered widely throughout the Ganga Plain. These soils are alkaline in character and not fit for cultivation.

In the plateau region generally three types of soils namely, upland or rocky soils, low land or black soils (Mar, Kabar) the red and yellow soils (Plarua, Kankar) are found. Rocky soils are found mainly in Banda district which are locally known as Patha soils they also include some poorer varieties of Parua, Mar and Kabar soils with texture varying from clay loam to sandy loam. Mar and Kabar soils are calcareous and posses a high degree of fertility and are predominantly clay. Red soils contain such types of parus and kankar. The former soils are light, sandy and the latter is eroded soil which is mostly found on higher elevation. Red soils have developed over granites and gneisses which have undoubtedly their parent rocks in the western part of this region especially in Jhansi district. In the eastern part they are associated with sandstones.

Climate

The entire state has tropical monsoon climate. In the plains, the temperature varies from a minimum 8^0 C in January to a maximum of 42^0C in May depending upon the season as well as the location of the place. The year is divided into three distinct seasons, the cold season from October till February, summer from March to mid June and Monsoon till September. The months of October and November bring winter and serve as the months of transition

with spells of weather cloudy to fair. It improves in the third week of November with the temperature of 20^0 C reaching a climax of cool weather in December 15^0 C .Temperate cyclones from west interrupt the rhythm of the weather by adding a little precipitation and more spells of cold waves.

Severe hot and dry weather conditions mark the summer season beginning from April. The mercury shows a tendency to rise abruptly and in May and June the temperature remains fairly above 40^0 C. The Ganga Plain burns and scorches with hot waves of westerly wind called *Loo.* The rainy period is termed as monsoon period. Nearly 85 to 90 percent of the annual precipitation is received during the four months from June to September. The western part of the Ganga plain has an average rainfall of 60 centimeters (cms) to 100 cms, whereas the eastern part of the plain receives 100 cms to 120 cms of rainfall. The plateau region receives an average rainfall of 100 to 120 cm. The rainy season is marked by high relative humidity, i.e. 70 percent of which creates climatic discomfort. The rainfall distribution has great impact upon the cropping pattern of the state and on irrigation. Paddy is the dominant crop in the eastern plain where the rainfall is above 100 cms Millets replace paddy in the southwestern and western region, where the rainfall is low. Since the rainfall is concentrated in a few months during the year it makes necessary to provide irrigation facilities in most part of the state particularly where rainfall is low.[3&4]

Distribution of Population

The distribution of population among the districts of the state is uneven and has wide range. It varies from 4936105 in Allahabad to 708447 in Mahoba. It is found that most of the northeastern states have population much lesser than that of single district of Uttar Pradesh.

The average population of a district is 2374. Thirty four districts have population more than the state average, whereas Fatehpur district with the population 2,308 is very close to the state average. Thirty six districts have

population lesser than the state average. The distribution of scheduled caste population in absolute figures varies from 1153,626 in Sitapur to 127813 in Baghpat district. The male (m) /female (f) breakup of population in Sitapur is 619501 male (m) and 534125 female(f) and in Baghpat district it is 127813 (m) and 69389 (f). Out of seventy districts of Uttar Pradesh twenty eight districts have scheduled caste population more than that of the state average i.e. 502120.

Density of Scheduled Caste Population

One of the important indices of the population concentration is the density of population. It is defined as the number of persons/Km^2. The population density in Uttar Pradesh has gone up from 473 in 1991 to 696 persons in 2001, which is more than two times the national average of 314 persons /Km^2. Uttar Pradesh though stands first in terms of population and fifth in terms of area, comes fourth in terms of density.

The population density of scheduled caste population in Uttar Pradesh is 128 persons /km^2. West Bengal, Bihar and Kerala are abnormally high densely populated states with as high densities as 909, 880 and 819 persons per square kilometers respectively. On the contrary Arunachal Pradesh, Mizoram, Andman and Nicobar Islands and Sikkim are the states of abnormally low densities of 13, 42, 43 & 76 persons per km^2 respectively. The population density of scheduled caste population in Uttar Pradesh is 128 persons/km^2 which is shown in the table no. 3.1. It varies from 517 persons/km^2 in Ghaziabad to 48 persons/km^2 in Lalitpur district.[6] Majority of western districts of Uttar Pradesh show low and very low level of scheduled caste densities. The reason for it, is high rate of industrialization and urbanization in western districts which does not provide sufficient employment base for scheduled caste population. In the southern plateau districts difficult climatic condition not only reduces the densities of scheduled caste population but also the total population.

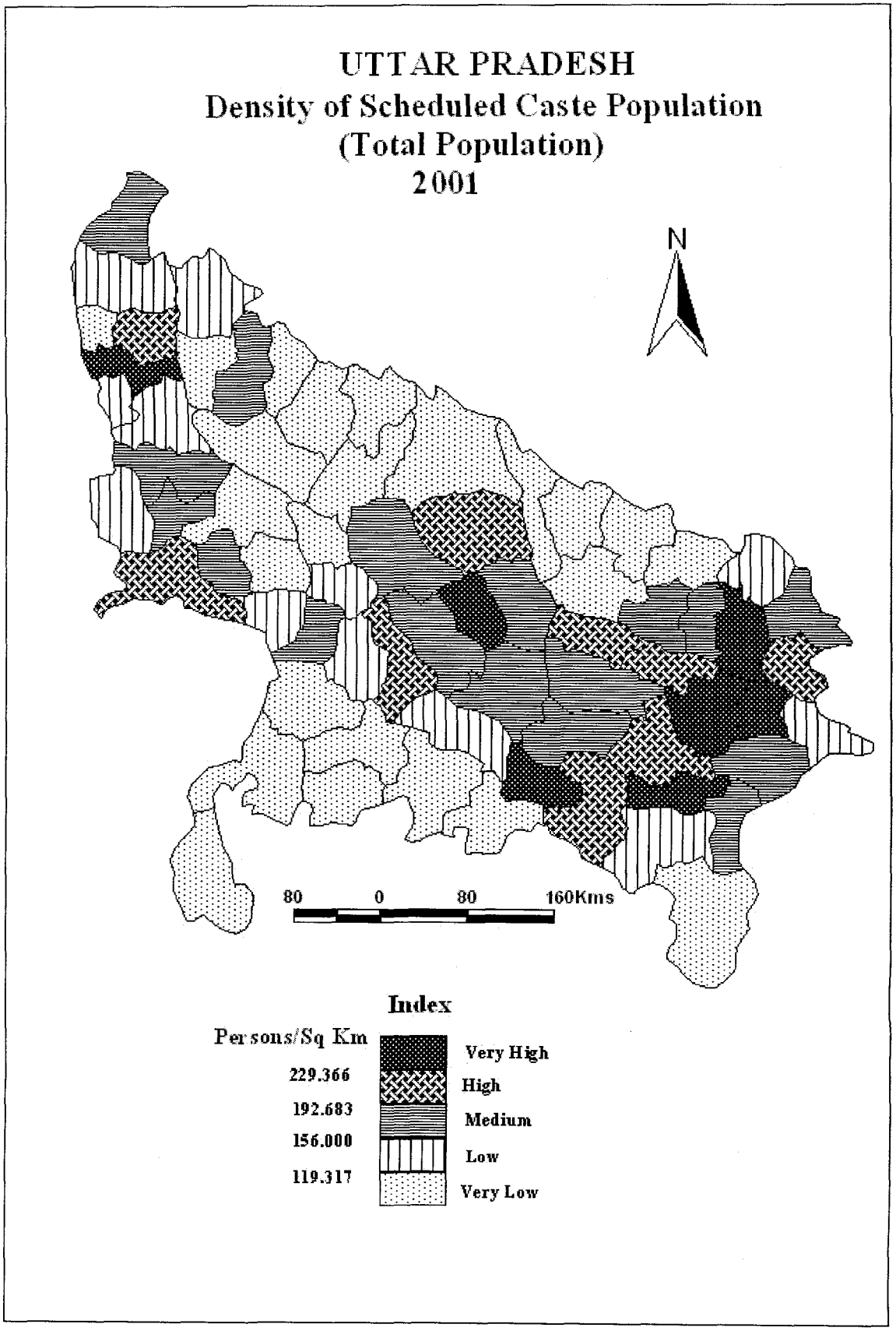

UTTAR PRADESH
Density of Scheduled Caste Population
(Total Population)
2001
N
80 0 80 160Kms
Index
Persons/Sq Km
229.366
192.683
156.000
119.317
Very High
High
Medium
Low
Very Low

Fig. 3.2

Table 3.1 District wise Distribution of the Density of Scheduled Caste Population, Density of Total Population and Ratio of Scheduled Caste Population to Total Population, Uttar Pradesh, 2001

Districts	Density of Scheduled Caste Population	Density of Total Population	Ratio of Scheduled Caste Population to Total Population
Saharanpur	171	785	21.7
Muzaffarnagar	119	884	13.5
Bijnor	144	687	20.9
Moradabad	163	1025	15.9
Rampur	109	813	13.4
Jyotiba Phule Nagar	115	667	17.3
Meerut	213	1157	18.4
Baghpat	97	881	11
Ghaziabad	517	2866	18
Gautam Budha Nagar	136	834	16.3
Bulandshahr	135	669	20.2
Aligarh	174	820	21.2
Hathras	183	726	25.2
Mathura	122	621	19.6
Agra	196	899	21.8
Firozabad	164	870	18.9
Etah	108	628	17.2
Mainpuri	112	579	19.3
Budaun	102	594	17.1
Bareilly	111	878	12.7
Pilibhit	72	470	15.2
Shahjahanpur	99	557	17.7
Kheri	107	315	25.6
Sitapur	201	497	31.9
Hardoi	178	459	31.4
Unnao	181	483	30.6
Lucknow	307	1093	21.3
Rae Bareilly	186	504	29.8
Farrukhabad	118	720	16.4
Kannauj	122	664	18.4
Etawah	136	579	23.4
Auraiya	162	586	27.7
Kanpur Dehat	129	517	24.8
Kanpur Nagar	217	1321	16.5
Jalaun	86	319	27

Table 3.1 (Continued)

Jhansi	97	347	28.1
Lalitpur	48	194	24.9
Hamirpur	56	244	22.8
Mahoba	63	246	25.8
Banda	72	345	20.8
Chitrakoot	64	242	26.3
Fatehpur	139	556	25
Pratapgarh	162	735	22
Kaushambi	262	726	36.1
Allahabad	194	900	21.6
Barabanki	163	607	26.9
Faizabad	202	892	22.6
Ambedkarnagar	211	863	24.4
Sultanpur	161	725	22.2
Bahraich	78	539	14.4
Shrawasti	88	479	18.4
Balrampur	68	502	13.5
Gonda	108	691	15.7
Siddharthnagar	117	705	16.5
Basti	162	776	20.9
San Kabir nagar	183	863	21.2
Maharajganj	144	736	19.5
Gorakhpur	250	1135	22
Kushinagar	180	996	18.1
Deoria	194	1069	18.2
Azamgarh	250	972	25.7
Mau	246	1082	22.7
Ballia	153	926	16.5
Jaunpur	212	969	21.9
Ghazipur	192	899	21.4
Chandauli	157	647	24.3
Varanasi	284	2045	13.9
Sant Ravidas Nagar	288	1334	21.6
Mirzapur	125	468	26.8
Sonbhadra	90	216	41.9
Uttar Pradesh	**128**	**690**	**21.5**

Source: Census of India, 2001

The reason for the heavy concentration of population in districts of the eastern plain is that these districts are ideally suited to agriculture and possess great potential to sustain heavy density of scheduled caste

population. The high pressure of population in the state ensures ample supply of labour which may be taken advantage of, in a developing economy but it also requires much larger resources for the economy to grow fast on a per capita basis, in fact for the general pattern of density distribution it has been rightly observed , Low densities are found in forest areas, mountainous and swampy areas, little cultivable land and unhealthy climate, whereas, high densities are found in places with good alluvial land, healthy climate and abundant excellent water supply for agriculture. However the density of the total population varies from 2866 persons/km^2 in Ghaziabad to 194 persons/km^2 in Lalitpur district.

Ratio of scheduled Caste Population to the Total Population

The picture of the distribution of scheduled caste population would be better understood when the percentage of scheduled caste population is observed in relation to the total population of the districts of the state. It is found that ratio of scheduled caste population to the total population varies from 41.9 per cent in Sonbhadra district to 11 per cent Baghpat district. This range is further divided into five catagories and its distribution is shown through fig 3.3. The first category very high ratio of scheduled caste population to the state's total population (above 27.00 per cent), is observed in eight districts namely, Hardoi, Sitapur, Unnao,Rae Bareilly, Kaushambi, Jhansi ,Aurraiya and Sonbhadra. High grade (24.27 per cent to 27.081 per cent) of this ratio is identified in Kheri, Hathras, Barabanki, Jalaun, Kanpur Dehat, Mahoba, Fatehpur, Chitrakoot, Mirzapur, Chaundali, Azamgarh and Ambedkar Nagar. The districts lying in medium grade (21.46 per cent to 24.27 per cent) of the ratio of scheduled caste population to total population is seen in twelve districts. Six of them (Faizabad, Sultanpur, Pratapgarh, Allahabad, Sant Ravidas Nagar and Jaunpur) in the east form a group. The other districts of the same grade are Gorakhpur, Mau, Hamirpur, Etawah, Agra and Saharanpur district. Low grade (18.64 per cent to 21.46 per cent) of this distribution is observed in Maharajgang, Sant Kabir Nagar, Basti, Ghazipur, Banda

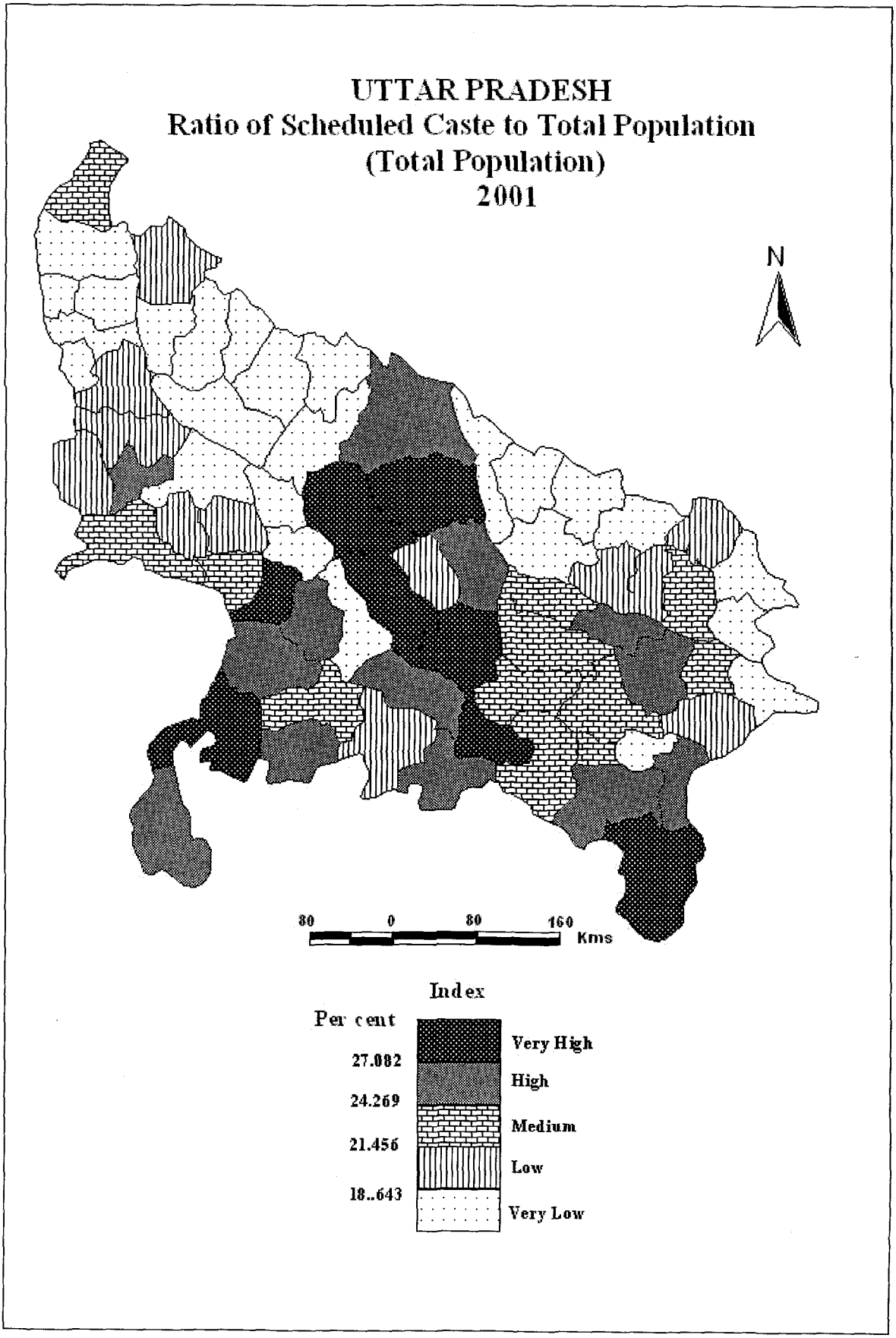

UTTAR PRADESH
Ratio of Scheduled Caste to Total Population
(Total Population)
2001
N
80
0
80
160
Kms
Index
Per cent
27.082
24.269
21.456
18..643
Very High
High
Medium
Low
Very Low

Fig. 3.3

Mainpuri, Firozabad, Mathura, Aligarh, Bulandshahar and Bijnor district. Very Low (below 18.64 per cent) ratio of scheduled caste population to total population is observed in around thirty six per cent districts of the state. These districts are distributed in the form of three distinct pocket of different size. The first pocket is formed by three eastern districts Kushi Nagar, Deoria and Ballia. Second pocket is formed by the eastern districts Bahraich, Shrawasti, Balrampur, Sidharth Nagar and Gonda district. A big pocket of this grade is formed by western districts Muzaffar Nagar, Baghpat, Meerut, Ghaziabad, Gautam Budha Nagar, Jyotiba Phule Nagar, Moradabad, Rampur, Bareilly Pilibhit, Shahjahanpur, Badaun, Etah, Farrukhabad, Kannauj and Kanpur Nagar.

Population Growth

Population growth is the most talked about subject today because unrestricted growth of population has a devastating effect on the quality of life. National and International efforts are not enough to guarantee even a reasonable comfort of living for us. One single reason for this is the ever increasing pressure of population on the limited resources of the nation.

Table 3.2 Decennial Growth Rate of Scheduled Caste Population (India, Uttar Pradesh) and Total population of Uttar Pradesh, 1971-2001

Year	Growth In Percentage		
	Total Population (India)	Total Population (UP)	Total Scheduled Caste Population (UP)
1961-71	24.80	19.79	24.42
1971-81	24.66	25.49	26.44
1981-91	23.85	25.48	24.83
1991-2001	2139	25.80	25.33

Source: Census of India 1971, 1981, 1991 and 2001.

The data given in the table no.3.3 shows that growth of India's total population for the present decade is 21.34 per cent which is less than the growth of total population of Uttar Pradesh (25.80 per cent) and the growth rate of scheduled caste population of the state i.e. (25.33 per cent).

Basic Socio Economic Personality

Agriculture

Agriculture is one of the predominant sectors of the country. According to 'statistical survey of India' the total reported area for land utilization is 2,97,94,000 hectares, out of which net sown area is 1,75,85,000 hectares and total cropped area is 2,66,09,000 hectare. The forest covers 52,13,000 hectares and the land, which is not available for cultivation, covers 34,86,000 hectares. Fallow land accounts for 17,70,000 hectare of land area, cultivable wasteland accounts for 8,96,000 hectares of land area, whereas land under miscellaneous tree crops accounts for 5,47,000 hectares land. Permanent pastures as well as grazing lands accounts for 2,96,000 hectare land. The total area under food grain production in Uttar Pradesh, is 2,01,02,000 hectares which produces 42,32,000 quintals of food grains.[6]

Minerals and Industries

Uttar Pradesh has not been well endowed with mineral resources, only few minerals are located in the south west due to geographical distinctiveness of this locality. The total value of all the minerals of the state is 2,73,69,891 thousand rupees in which 1,05,97,046 thousand rupees are contributed by coal and 1,07,83,670 thousand rupees by minor minerals.[7]

Uttar Pradesh is one of the industrially backward states in the country. In the context of national plan, a large state like Uttar Pradesh with nearly sixteen percent of the country's population if not fully developed will hamper the development of the nation. The growth of the state is not possible on account of mineral deficiency and the highly scattered nature of deposits. Important

mineral based industries include large cement plants in Sonbhadra, synthetic emery plant in Banda, glass industry in Banda, silica sand benefaction plant in Allahabad and elemental phosphorous plant in Lalitpur. The present resources are meager and future occurrences are doubtful and so the scope for development of the mineral based industries in the state is modest.

Power and Irrigation

Energy plays an important role in the development of any region. It is one of the basic infrastructures through which development in industrial, commercial, agricultural and in transport sector can take place. In the pattern of consumption, electricity is more used for irrigation in Uttar Pradesh than for industries. The total electricity used in agricultural sector is 998.3 crore kwh during the year 1998-99. Total electricity generated by the state is 2307.1 crore Kwh whereas its consumption is 998.370 Kwh is sold to agriculture sector.[8] Uttar Pradesh power corporation, Uttar Pradesh state power and Uttar Pradesh hydel power corporation formed by reorganizing 14 January 2000. During the year 2004-05 an expenditure of Rs.98715 crores was made to raise the irrigation potential to a level of 319.17 lakh hectares. At the time of inception the total installed capacity of Uttar Pradesh State Electricity Board, including thermal & hydro, was 2635 MW which has now been raised to 4621 MW.[9]

Transport and Communication

The importance of transport and communication in the economic development and prosperity of any region can hardly be overemphasized. It reflects the economic advancement, social conditions and the political set up of an area. Easy accessibility to different parts of a region is one of the important factors in its overall development. The railways and roads are the principal transport systems in Uttar Pradesh having vast network which connect almost every locality with each other.

Lucknow is the main junction of the northern network, other important railway junctions are Agra, Kanpur, Allahabad, Mughalsarai, Dehradun, Varanasi, Tundla, Gorakhpur, Gonda, Faizabad, Bareilly and Sitapur. Water and air transport are less developed in Uttar Pradesh.[10]

Urbanization

Urbanization in Uttar Pradesh has been rather slow because the population has a higher rural composition and primary occupations predominate. According to 2001 census, the urban part of the total population of the state is 20.79 per cent whereas for scheduled caste population it is 12.33 per cent. The number of inhabited villages is 97942 while uninhabited villages are 9510 and the number of towns is 689. Apart from it, there are 53 class one cities, 57 class two cities and 186 class three cities in Uttar Pradesh.[11]

Literacy

Literacy rate of the India is 69 per cent whereas for the total population of the Uttar Pradesh it is 56.3 per cent with the male/female breakup of 68.8 per cent and 42.2 per cent. The literacy rate of scheduled caste population is 46.3 per cent with the male/female breakup of 60.3 per cent and 30.5 per cent and rural/urban breakup of literacy rate of scheduled caste is 49.52 per cent and 58.17 per cent. The literacy rate for scheduled caste population shows great variation at the district levels. The range of variation is 62.31 per cent in Ghaziabad and 31.32 per cent in Sonbhadra.

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CHAPTER 4

TRENDS AND PATTERNS OF SCHEDULED CASTE EMPLOYMENT

Employment rate of any social group (including the scheduled caste) represents the percentage of workers to the total population. Employment plays a key role in the socio-economic development of a region. It is not only studied in geography but also in various other disciplines like demography, sociology and economics. Now with the growing emphasis on the regional planning the study of employment is becoming indispensable for the socio economic development of any society or any region. Thus analysing the significance of scheduled caste employment it is necessary to examine in detail the employment rate of the whole population by sex and on rural- urban basis over a period of the last four decades (1971-2001)

Trends of Scheduled Caste Employment Rate

Employment rate per cent of economically active population is not static; it changes from time to time and from one region to another depending mainly upon the demographic characteristics of population, economic base of any region, educational status of inhabitants, level of technical know how of the people, government policies and health status of the people. Except government policies, all the other determinants are not very much favourable for scheduled caste population. The trend of scheduled caste employment rate is studied in relation to the trend of total population (Uttar Pradesh) and that of the scheduled caste population of India, so that the comparative assessment of the employment rate of scheduled caste population with other population groups is made possible. This is studied both sex wise as well as residence wise.

Trends of Employment Rate of Total Scheduled Caste Population in Uttar Pradesh (U.P) and India, 1971-2001

It is inferred from the table no. 4.1 that at the country level, total scheduled caste employment rate is highest, followed by the employment rate of total scheduled caste population and the total population of Uttar Pradesh. This higher percentage of scheduled caste employment is associated with their poor socio-economic status which compels them to join the economic struggle at an early stage and in greater number.[1]

Table: 4.1 Trends of Scheduled Caste Total Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Total Scheduled Caste Employment Rate(India)	Total Scheduled Caste Employment Rate(U.P)	Total Population Total Employment Rate(U.P)
1971	36.34	33.77	30.94
1981	39.58	33.6	30.7
1991	39.25	35.29	32.2
2001	40.4	34.7	32.5

Source: Census of India 1971, 1981, 1 991 and 2001

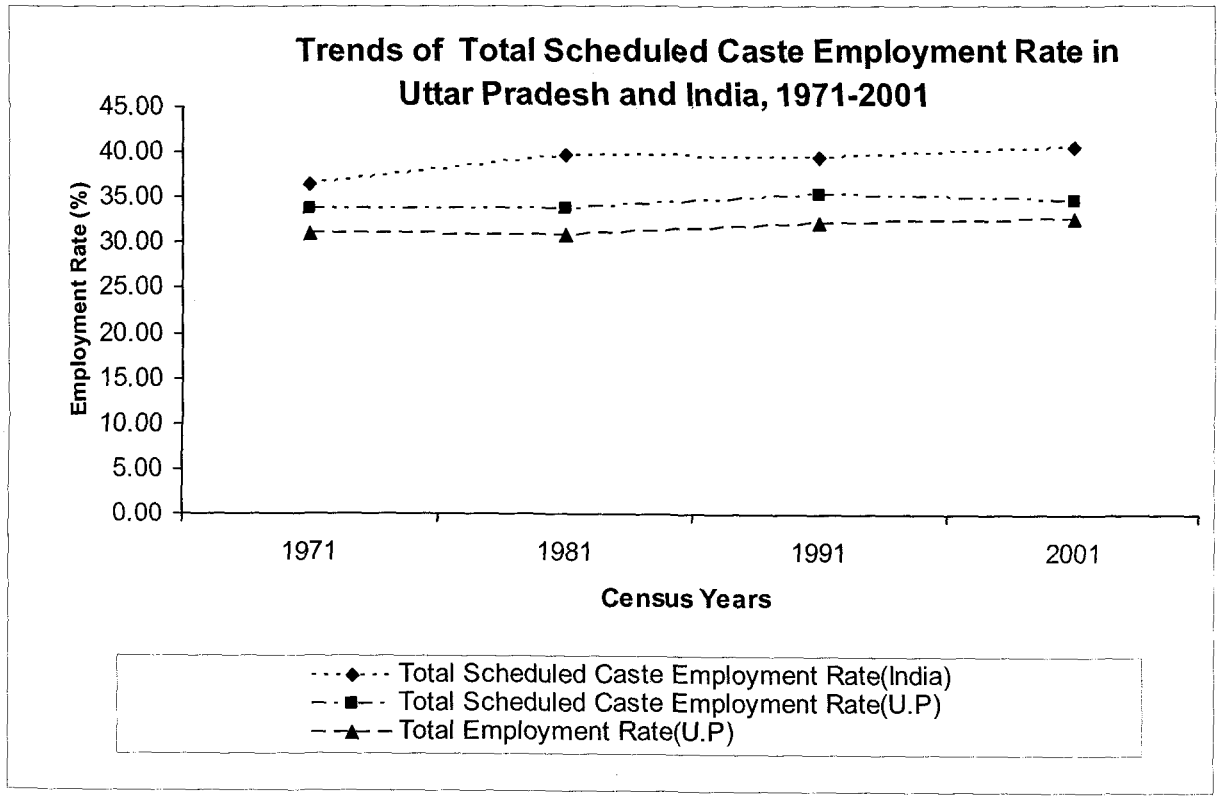

Fig. 4.1

Trends of Employment Rate of Rural Scheduled Caste Population in Uttar Pradesh and India, 1971-2001

The rural employment rate is highest for India's scheduled caste population and is followed by employment rate of rural scheduled caste population of

Table 4.2 Trends of Employment Rate of Rural Scheduled Caste Population in India and Uttar Pradesh, 1971-2001

Census Year	Rural Scheduled Caste Employment Rate(India)	Rural Scheduled Caste Employment Rate(U.P)	Rural Employment Rate(UP)
1971	37.02	34.25	31.48
1981	41.16	34.19	31.5
1991	41.30	36.22	33.46
2001	42.5	35.8	33.9

Source: Census of India 1971, 1981, 1 991 and 2001

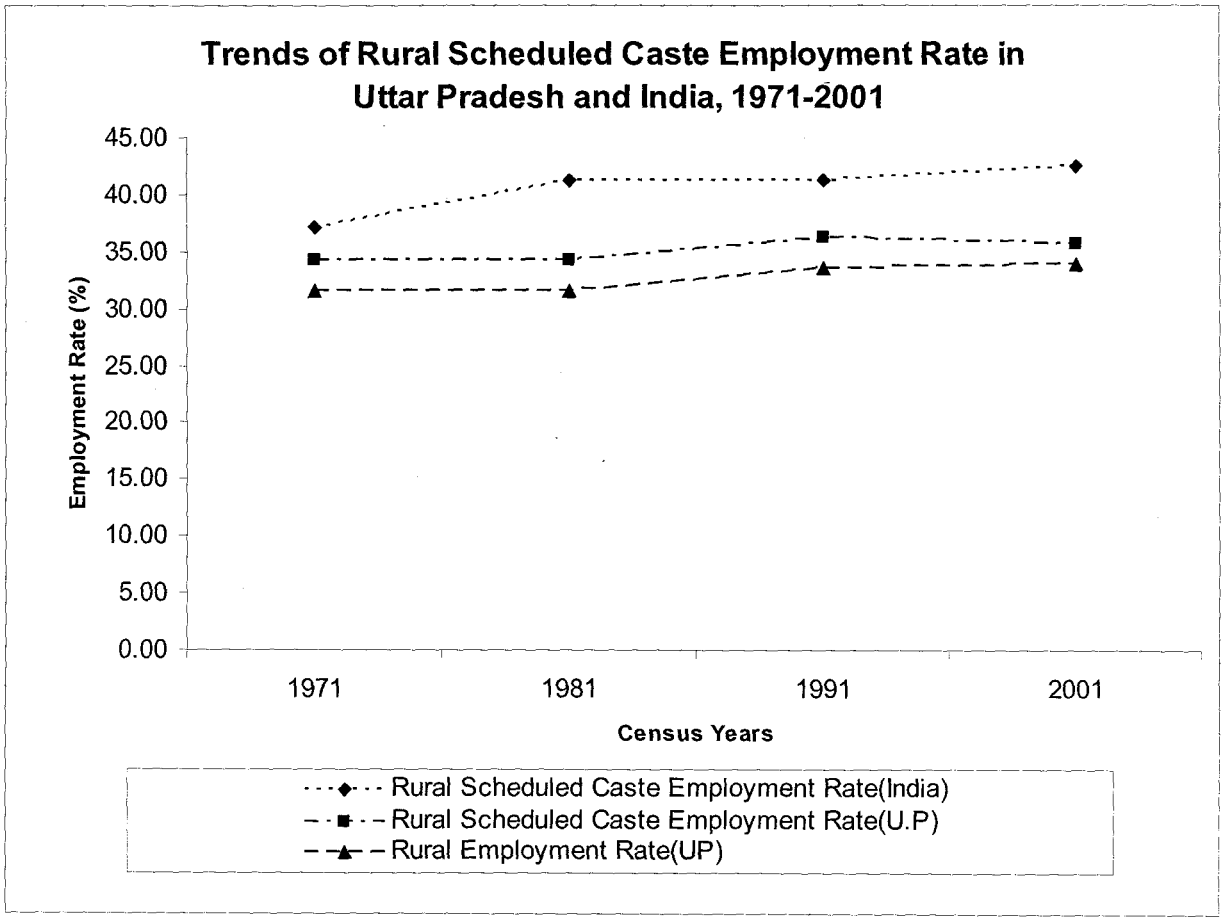

Fig. 4.2

Uttar Pradesh and the employment rate of total rural population of the same. The graphic illustration in fig 4.2 of the rural employment rates clearly indicates that the rural employment rate of scheduled caste population of India and the rural employment rate of total population of the state is showing slow upward trend, whereas, the rural employment rate of scheduled caste population of the state is little bit fluctuating.

Trends of Employment Rate of Urban Scheduled Caste Population Uttar Pradesh and India, 1971-2001

It is revealed from the table 4.3 the urban scheduled caste employment rate during 1971-2001 is found to be lower than the rural employment rate of scheduled caste at all the levels. The low level of urban employment rate of scheduled caste than the employment rate of rural scheduled caste population is due to the following reasons. In urban areas majority of the available jobs require certain minimum level of education and training which is lacking in them. Rapid rate of urbanization and industrialization is continuously absorbing the scheduled caste people here either in construction work or in other miscellaneous jobs.[2] Higher per capita income in urban areas lessens the burden of earning livelihood on all the members of a family, who otherwise are compelled to do any type of work. The India's scheduled caste employment rate is constant in the decade 1971-81 but after that it shows an upward trend. This means that scheduled caste employment has increased after 1981. Scheduled caste employment rate of Uttar Pradesh is also not constant; at first it increases but later on it shows downward trend. So far as the employment rate of total urban population of the state is concerned, it is almost constant with slight ups and downs. This graphic illustration also demonstrates that trend line of the employment rate of urban scheduled caste people of the nation runs over the trend lines of the other two population groups. The origins and the ends of the trend lines of urban employment rates of scheduled caste and total population of the state are the same but the employment rate of total population of the state is

Table: 4.3 Trends of Scheduled Caste Urban Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Urban Scheduled Caste Employment Rate(India)	Urban Scheduled Caste Employment Rate(U.P)	Total Population Urban Employment Rate (U.P)
1971	31.27	27.82	27.67
1981	31.27	29.25	27.30
1991	30.35	28.36	27.14
2001	32.10	27.10	26.90

Source: Census of India, 1971, 1981, 1991 and 2001

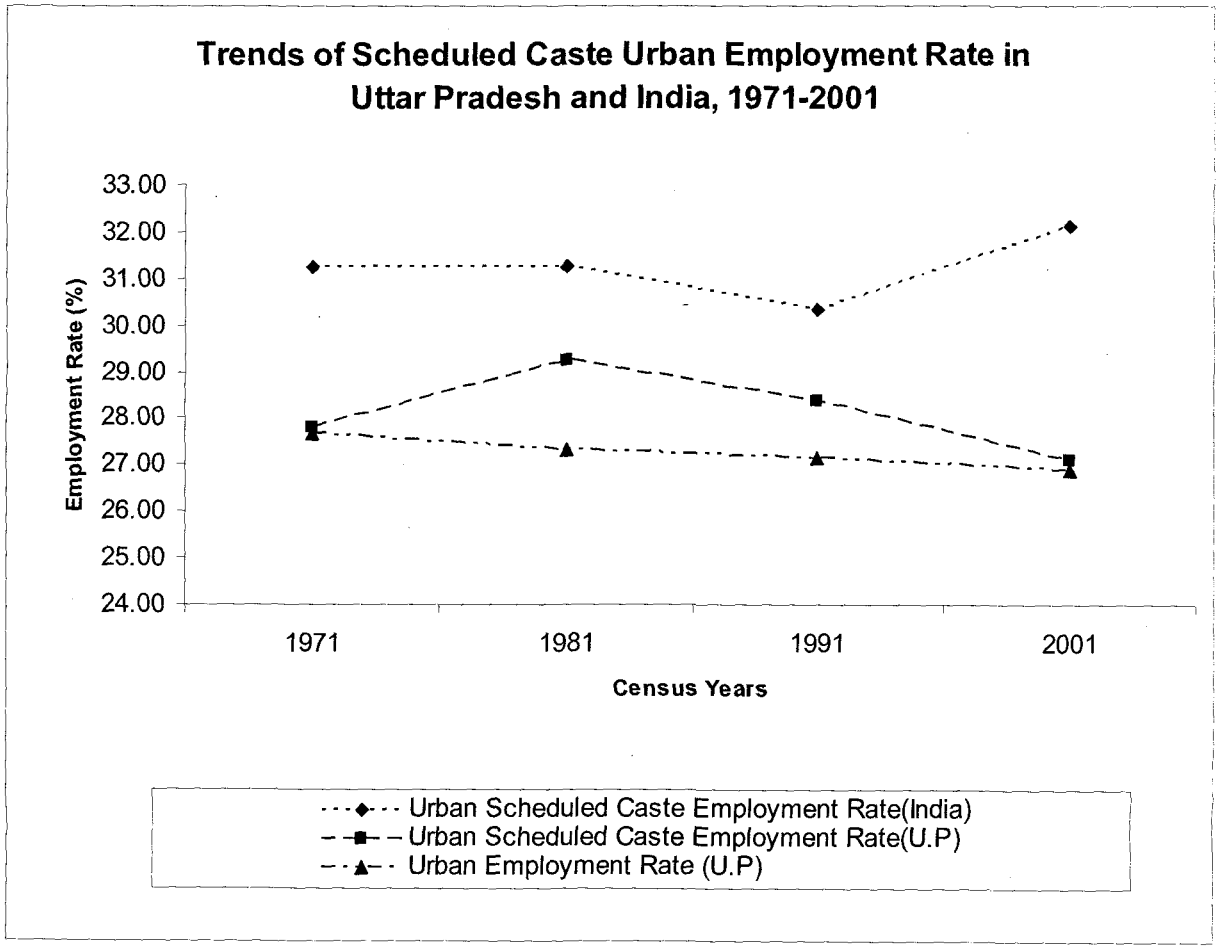

Fig. 4.3

almost constant at different points of time whereas for scheduled caste population it is fluctuating.

The rural-urban difference in the employment rate is much more pronounced in case of scheduled caste population both at country and state level whereas this difference for total population of the Uttar Pradesh is comparatively lower. The larger rural-urban difference of employment rate of scheduled caste people is associated with the improved figure of rural employment rate in this population group due to larger availability of employment in primary sector here.

Trends of Employment Rate of Total Male Scheduled Caste Population in Uttar Pradesh and India, 1971-2001

Fig 4.4 clearly indicates that total male employment rate for all the three population groups are showing continuously down slope trend whereas, the total employment rate for the three population groups has been continuously increasing. Thus it could be inferred that continuous increase in the employment rate is an outcome of the progressively rising figure of female employment rate. This gradual decline in scheduled caste male employment seems to be associated with the conceptual change in the definition of workers in 1981 as in this decade a clear distinction between main and marginal workers has been made (Census of India 1981). In the decade 1991 reduction in the number of child labour with increase in attendance in the schools is found to be associated with the decline of scheduled caste male workers.[3&4] The trend line of total male employment rate of India is running above the rest of the two.

Table: 4.4 Trends of Scheduled Caste Total Male Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Total Male Scheduled Caste Employment Rate(India)	Total Male Scheduled Caste Employment Rate(U.P)	Total Population Total Male Employment Rate(U.P)
1971	54.06	53.39	52.24
1981	53.67	52.2	50.76
1991	51.48	50.8	49.68
2001	50.7	46.9	46.8

Source: Census of India, 1971, 1981, 1991 and 2001

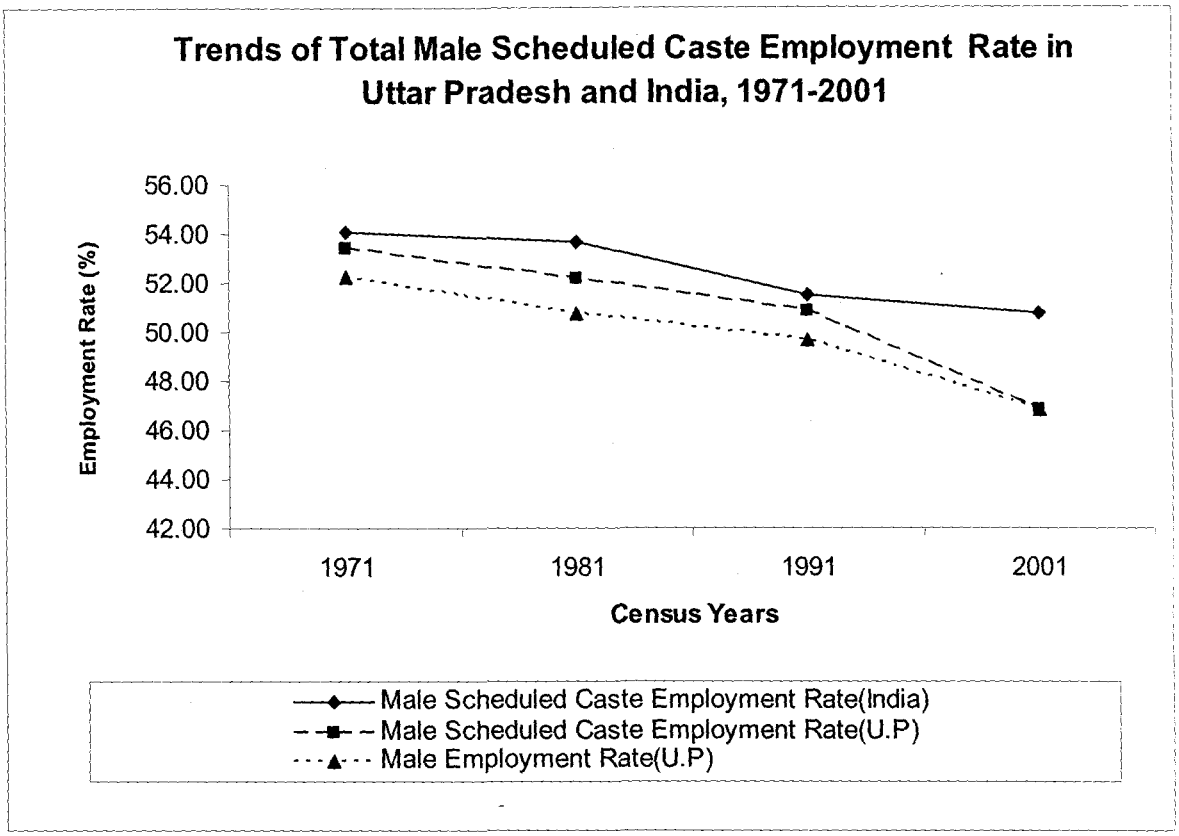

Fig. 4.4

It is also observed that the trend line of the remaining two groups (scheduled caste male employment rate of Uttar Pradesh and total male employment rate of Uttar Pradesh) are running almost at the same level. The graph of the employment rate of India's total male scheduled caste population starts from 54.06 per cent in 1971 which decreases to 53.97 per cent in the decade 1981; it further goes down 51.48 per cent is the next decade and finally it reaches to 50.7 per cent in the decade 2001. The trend line of the total scheduled caste male employment rate of Uttar Pradesh starts from 53.39 per cent in the decade 1971 and it goes down to the 53.2 per cent in the decade 1981 which further goes down to 50.8 per cent in the decade 1991 and finally it descend to 46.9 per cent in the decade 2001. The line graph of the male employment rate of total population of the state starts from 52.24 per cent in the year 1971 which goes down to 50.76 per cent in the decade 1981 and it falls further to 49.68 per cent in the next decade 1991 and then finally it reaches to 46.9 per cent in the decade 2001.

Trends of Employment Rate of Rural Male Scheduled Caste Population in Uttar Pradesh and India, 1971-2001

The line graph of rural male employment rate is showing continuously down slope movement in each population group. It seems to be the results of the continuous increase of the female employment rate.

Table 4.5 Trends of Scheduled Caste Rural Male Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Rural Male Scheduled Caste Employment Rate(India)	Rural Male Scheduled Caste Employment Rate(U.P)	Total Population Rural Male Employment Rate(U.P)
1971	54.94	54.11	52.98
1981	54.87	52.71	51.49
1991	52.66	51.43	50.5
2001	51.6	47.4	47.4

Source: Census of India, 1971, 1981, 1991 and 2001

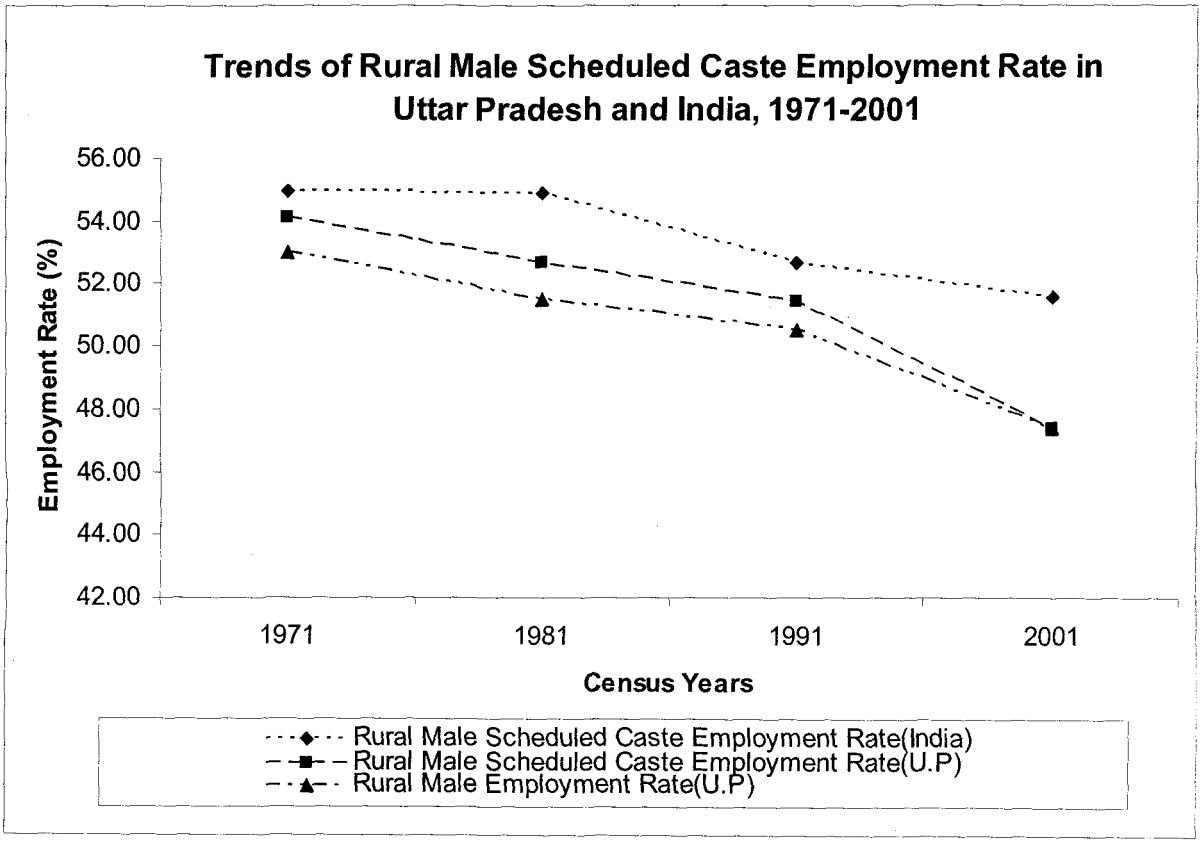

Fig. 4.5

As depicted from the fig 4.5 the employment rate of rural male scheduled caste population of India starts from 54.06 per cent in the decade 1971 and ends to 50.70 per cent in the year 2001. The employment rate of rural male scheduled caste population of Uttar Pradesh starts from 54.11 per cent and ends at 47.4 per cent, whereas, the employment rate of rural males of the total population of the state starts from a slightly lower level i.e. 52.98 per cent, but both the readings end at the same point i.e. 47.4 per cent. This means that the downward trend of the scheduled caste rural male employment rate of the state is steeper than the trend of employment rate of total rural male population of Uttar Pradesh and rural male employment rate of the country.

Trends of Employment Rate of Urban Male Scheduled Caste Population in Uttar Pradesh and India, 1971-2001

The graphic illustration of urban male employment rate (fig 4.6) of all the three population groups (urban male scheduled caste of India, urban male scheduled caste of Uttar Pradesh, and total urban male population of Uttar Pradesh) indicates that the employment rate of all the above mentioned groups are very much similar. The employment rate of urban males is showing slight ups and downs for the scheduled caste population of the country and the state, whereas, for the total population of the state it always moves down ward. The urban male employment rate of India's scheduled caste population starts from 47.73 per cent in 1971 which slightly goes down to 47.50 per cent in the next decade and reaches to 47.4 per cent in the decade 1981 and then it descends down to 46.40 per cent in 1991 and finally it reaches to 47.4per cent in the decade 2001.The urban male employment rate of Uttar Pradesh's scheduled caste population starts from 44.97 per cent, which increases slightly in the next decade and reaches to 48.12 per cent and then in 1991 it descends down to 47.18 per cent and finally in the decade 2001 it falls to 43.1 per cent. The urban male employment rate of total population starts from 47.85 per cent which slightly decreases to 47.46 per cent in the next decade and it further goes down to 46.36 per cent in the decade 1991 which further goes down to 44.6 per cent in 2001.

Table: 4.6 Trends of Scheduled Caste Urban Male Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Urban Male Scheduled Caste Employment Rate(India)	Urban Male Scheduled Caste Employment Rate(U.P)	Total Population Urban Male Employment Rate(U.P)
1971	47.73	44.97	47.85
1981	47.50	48.12	47.46
1991	46.40	46.18	46.36
2001	47.40	43.10	44.60

Source: Census of India, 1971, 1981, 1991 and 2001

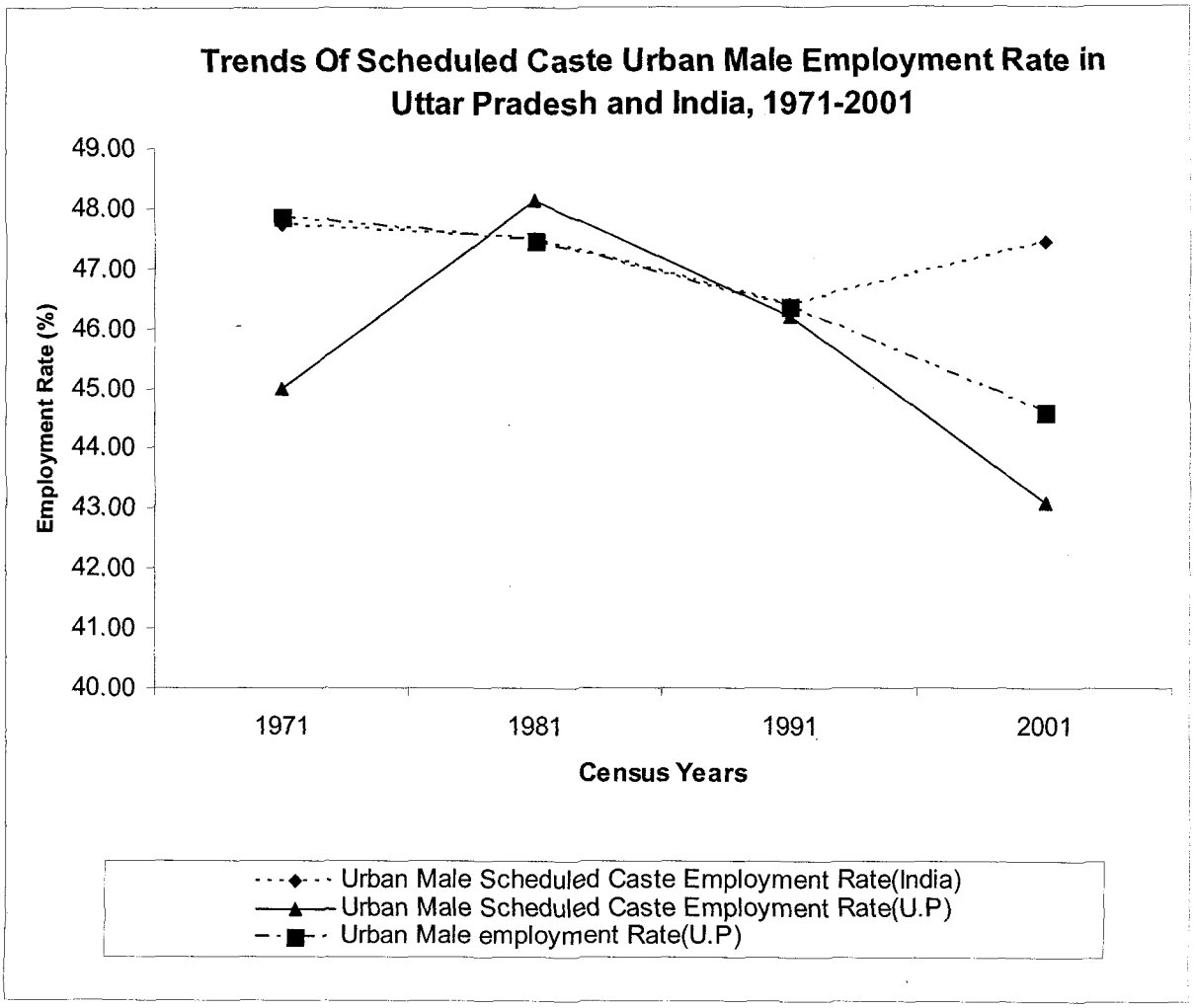

Fig. 4.6

Trends of Employment Rate of Total Female Scheduled Caste Population in Uttar Pradesh and India, 1971-2001

The fig 4.7 shows that total female employment rate is comparatively lower than the male employment rate for all the population groups considered in all the

above mentioned decades. Contrary to the male employment rate, female employment rate is continuously showing an upward trend for each population group. This seems to be associated with continuous increase in female literacy rate, the increase in percentage of female agricultural labourers and gradual decrease of inhibition against female out door activities opening many doors of employment to them.

At the state level, it is noticed that scheduled caste female employment rate is comparatively higher than the female employment rate of total population, this can be reasoned out from the poor socio-economic conditions which compel the scheduled caste females to join the struggle of earning livelihood. Apart from it, scheduled caste female workers are comparatively free from the social inhibitions of joining socially less acceptable outdoor activities whereas the general females are not allowed to do so.[5&6]

The line graph of the employment rate of India's female scheduled caste population runs above the employment rate of the other two population groups. It starts from 17.39 per cent in the year 1971 and goes to 24.46 percent in the next decade followed by an increase of more than 1 per cent in the 1991 and finally it reaches to 29.4 per cent in the year 2001.The line graph of the employment rate of female scheduled caste population of Uttar Pradesh is continuously showing an ascending trend from the origin. It starts from 11.86 per cent in 1971and goes to 12.88 per cent in 1981, followed by 17.61per cent in 1991 and finally ascends to 21.2 per cent in 2001. The trend line of the employment rate of females of the total population of the state also shows an upslope movement; it starts from 6.71 per cent in 1971 and goes to 8.07 per cent in the next decade, then reaches to 12.32 per cent in 1991 and finally in the decade 2001 it touches to 16.5 per cent.

Table 4.7 Trends of Scheduled Caste Total Female Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Total Female Scheduled Caste Employment Rate(India)	Total Female Scheduled Caste Employment Rate(U.P)	Total Female Employment Rate(U.P)
1971	17.39	11.86	6.71
1981	24.46	12.88	8.07
1991	25.98	17.61	12.32
2001	29.4	21.2	16.5

Source: Census of India, 1971, 1981, 1991 and 2001

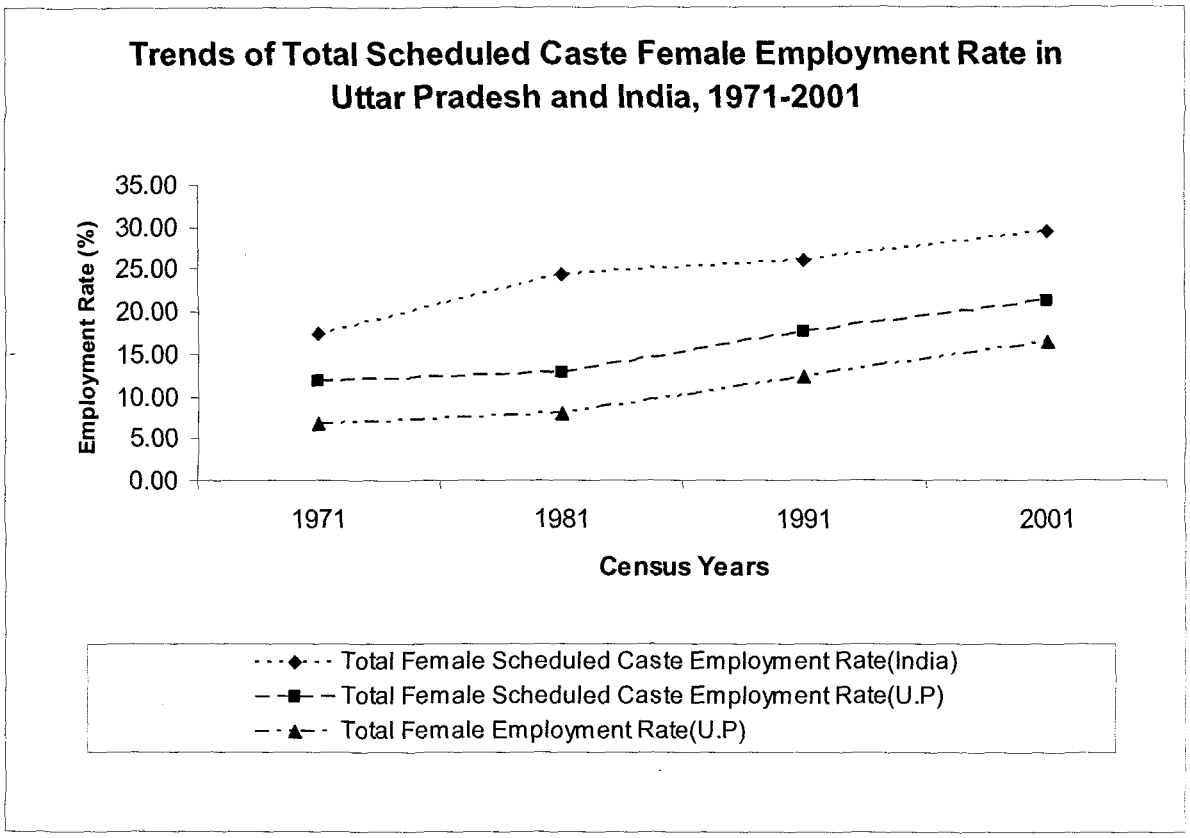

Fig. 4.7

Trends of Employment Rate of Rural Female Scheduled Caste Population Uttar Pradesh and India, 1971-2001

The figures of the employment rate of rural female populations are quite encouraging for all the three population groups. In case of India's rural female scheduled caste population and the state's total population, the trend line of employment rate is always going up and up. It is inferred from the table 4.8 that

India's rural scheduled caste females this line graph starts from 18.01 per cent in 1971 and reaches to 32.9 per cent in the decade 2001, whereas, for the rural females of the total population, it starts from 7.27 per cent in the decade 1971 and goes up to the 19.0 per cent in the last census year i.e., 2001. In case of rural female scheduled caste population of the state, the trend line of employment rate starts from 12.25 per cent in the year 1971 and goes to 13.55 per cent in the next decade, then it decreases slightly till 13.43 per cent in 1991 and finally it reaches to 22.9 per cent in 2001

Table 4.8 Trends of Scheduled Caste Rural Female Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Rural Female Scheduled Caste Employment Rate(India)	Rural Female Scheduled Caste Employment Rates(U.P)	Total Population Rural Female Employment Rate(U.P)
1971	18.01	12.25	7.27
1981	26.57	13.55	9.04
1991	29.02	13.43	14.16
2001	32.9	22.9	19

Source: Census of India, 1971,1981, 1991 and 2001

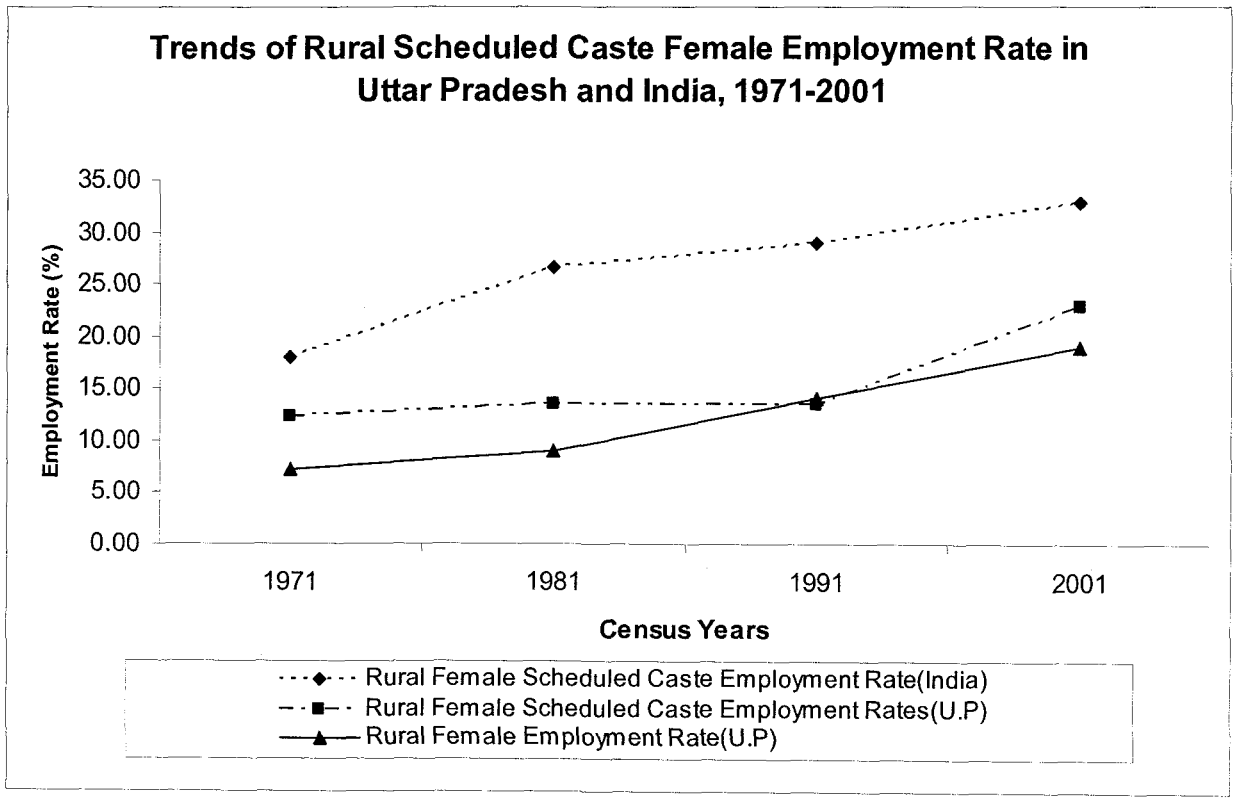

Fig. 4.8

This encouraging figure of scheduled rural females seems to be associated with high percentage of scheduled females as agricultural labourers in rural areas mainly.[7]

Trends of Employment Rate of Urban Female Scheduled Caste Population in India and Uttar Pradesh, 1971-2001

It is shown in the table 4.9 that urban female employment rate is comparatively low for all the three population groups. Among these three population groups, the trend line of India's urban female scheduled caste employment rate is followed by the trend line of urban female scheduled caste employment rate of Uttar Pradesh and employment rate of urban females of total population of Uttar Pradesh. The trend line of India's urban scheduled caste female is fluctuating. It starts from 12.62 per cent in the decade 1971 and ascends to 13.08 per cent in 1981 followed by the decrease of half percent in the next decade and finally it touches to 15.6 per cent in 2001. The line graph of Uttar Pradesh's urban scheduled caste female starts from 6.88 per cent in 1971 and remains almost constant (6.87per cent) in the census year 1981 and goes up to the 7.49 per cent in the decade 1991 and finally reaches to 8.8 per cent in the recent census year 2001.

Table: 4.9 Trends of Scheduled Caste Rural Female Employment Rate in Uttar Pradesh and India, 1971-2001

Census Year	Urban Female Scheduled Caste Employment Rate(India)	Urban Female Scheduled Caste Employment Rate(U.P)	Total Population Urban Female Employment Rate(U.P)
1971	12.62	6.88	3.10
1981	13.08	6.87	3.46
1991	12.61	7.49	4.78
2001	15.60	8.80	6.80

Source: Census of India, 1971, 1981, 1991 and 2001

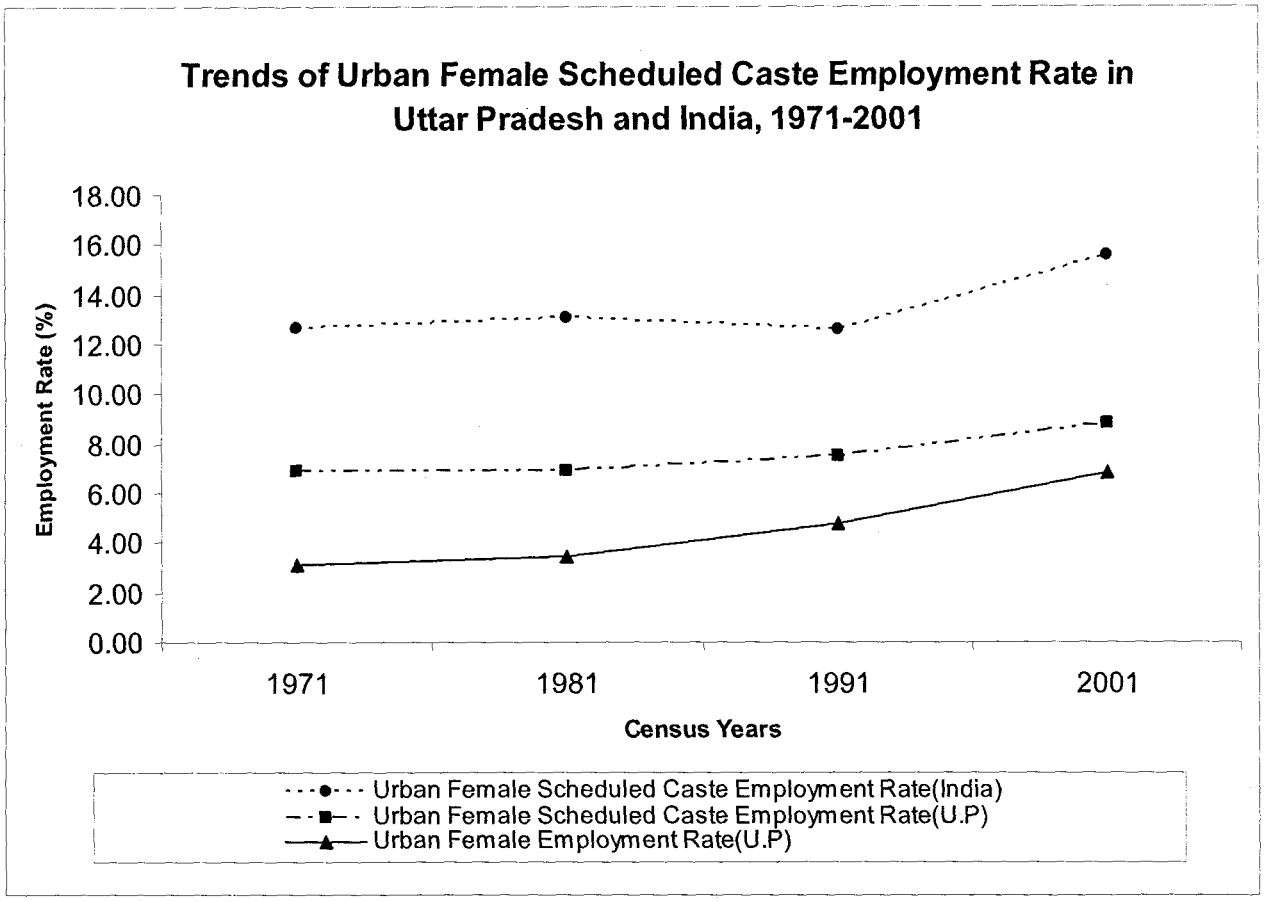

Fig. 4.9

The line graph of total urban female employment rate of the state shows an increasing trend. It starts from 3.1 per cent in decade 1971 and reaches up to 6.8 per cent in the last census year. This increase is associated with scheduled caste migration from rural areas to urban areas where the demand of manual labour worker for the other menial works is high.[8]

Trends of Total Main and Marginal Employment Rate of Scheduled Caste Population in Uttar Pradesh and India, 1971-2001

It is shown in the fig 4.10 that the employment rate of scheduled caste population is higher than the employment rate of total population in the state during all the above-mentioned decades. This higher rate of employment does not indicate that scheduled caste people are in better socio-economic condition. The forthcoming paragraph will explain the ground realities behind their higher rate of employment. Percentage share of marginal workers is higher for the

Table: 4.10 Trends of Total, Main and Marginal Employment Rate of Scheduled Caste Population and Total Population in Uttar Pradesh 1971-2001

Census Year	Employment Rate of Scheduled Caste (U.P)	Employment Rate of Total Population (U.P)	Per cent of Scheduled Caste Main Workers (U.P)	Per cent Of Main Workers of Total Population (UP)	Per cent of Scheduled Caste Marginal Worker (UP)	Per cent of Marginal Workers Total Population (U.P)
1971	33.77	30.94	-	-	-	-
1981	33.67	30.72	31.65	29.22	2.02	1.49
1991	35.29	32.20	32.40	29.73	2.89	2.47
2001	34.70	32.50	22.60	23.70	12.10	8.80

Source: Census of India, 1971, 1981, 1991 and 2001

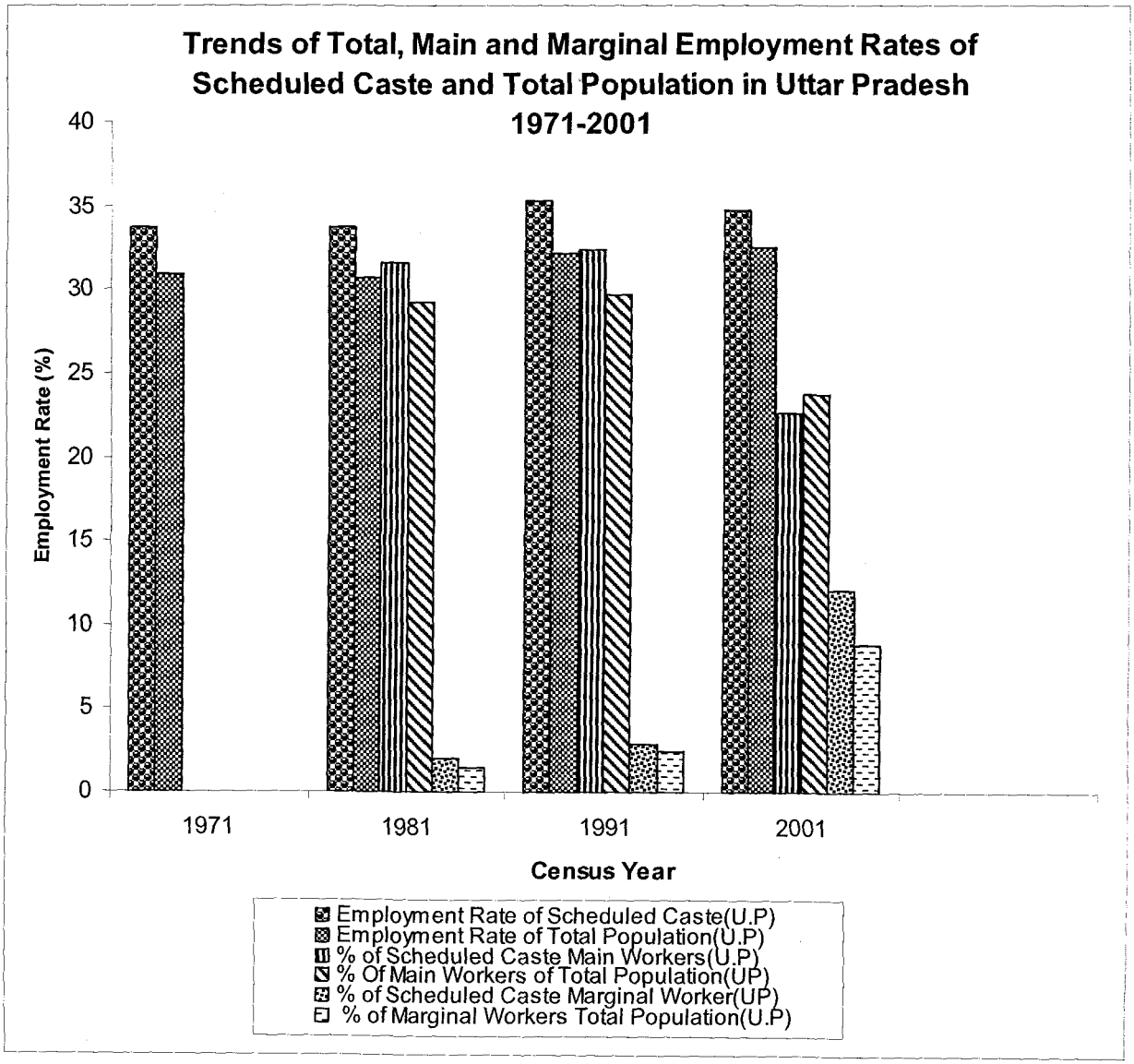

Fig. 4.10

the category of main and marginal workers). The reason behind the comparatively higher percentage of scheduled marginal workers is their extreme poverty and low literacy which compels the them to rush behind the least remunerative and marginal works.[9] Percentage of main workers is higher in scheduled caste population than the total population of the state. The increasing share of marginal workers among the total population in general and scheduled caste population in particular seems to be associated with the increasing share of seasonal or part time jobs due to mechanization of agriculture and privatization over the period of time.

Occupation wise Distribution of Scheduled Caste Population in Uttar and India, 2001

The total primary employment rate of scheduled caste people of India is higher than secondary or tertiary employment rates of the same population group or the primary, secondary or tertiary employment rates of scheduled caste population and the total population of Uttar Pradesh. The primary group of occupation is more obvious in rural areas in all the three population groups than urban population of the same. Secondary and tertiary employment group of occupation is more pronounced in urban population of all the three. It is also clear from the fig 4.11 that in case of rural population of all the three population groups (scheduled caste population of India and Uttar Pradesh and total population of Uttar Pradesh) secondary group of employment rate surpasses the tertiary employment rate, whereas, contrary to it is observed in case of urban counter parts of these three population groups. The reason for comparatively higher share of tertiary employment in urban areas is diversification of economy which has increased the opportunities in tertiary sector ranging from high tech jobs to the menial kind jobs. The reason of higher percentage of secondary workers than tertiary workers in rural areas is the lesser development of tertiary sector in rural areas and comparatively larger percentage of household industry workers there.

Table 4.11 Occupation wise Distribution of Scheduled Caste Population in Uttar Pradesh and India, 2001

Occupational group	Primary Employment Rate	Secondary Employment Rate	Tertiary Employment Rate
Total Scheduled Caste(India)	19.27	4.81	5.39
Total Scheduled Caste (U.P)	16.20	3.34	3.10
Total Population (U.P)	15.12	3.55	4.97
Rural Scheduled Caste(India)	23.12	3.60	3.26
Rural Scheduled Caste(U.P)	18.10	2.70	1.96
Total Rural Population(U.P)	18.49	2.51	2.70
Urban Scheduled Caste(India)	4.03	9.58	13.82
Urban Scheduled Caste(U.P)	2.68	7.91	11.16
Urban Total Population(U.P)	2.29	7.51	13.63

Source: Census of India, 1971, 1981, 1991 and 2001

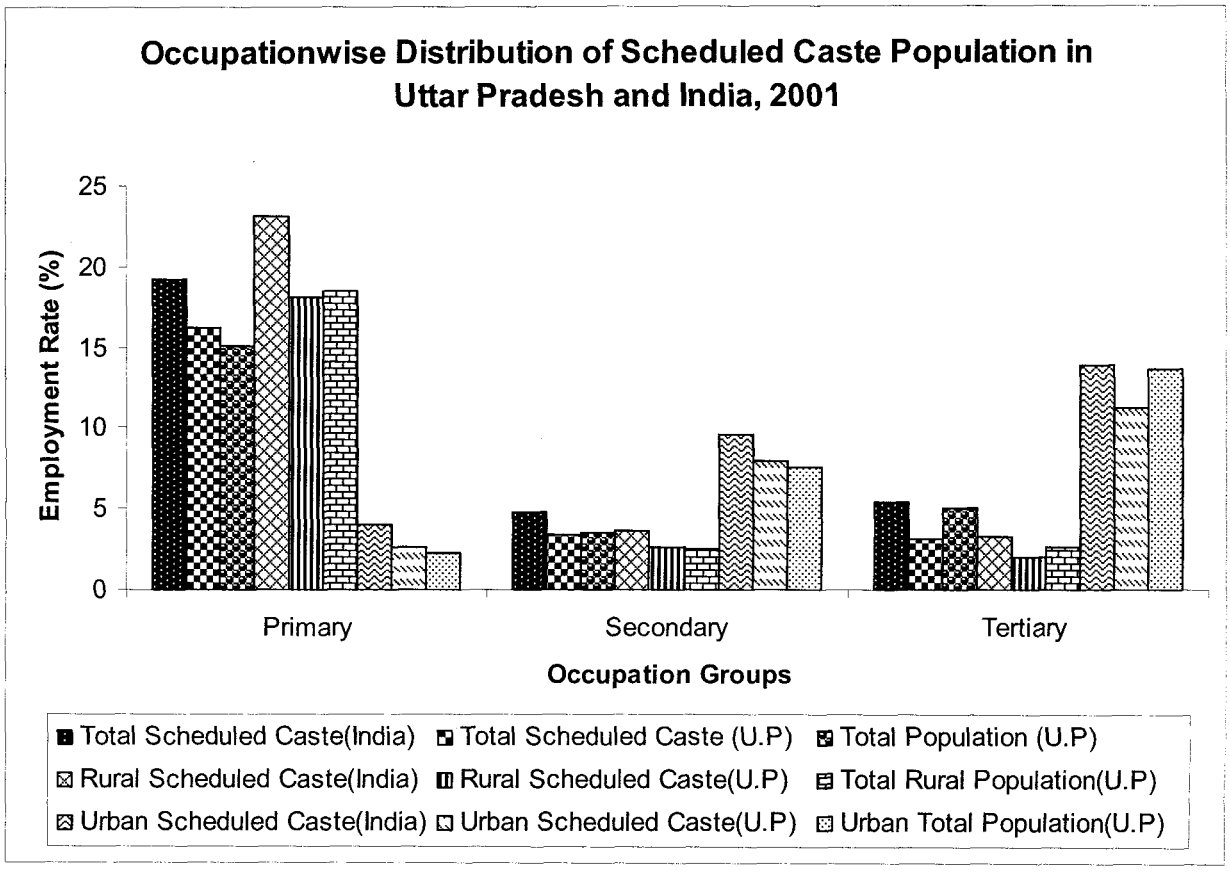

Fig. 4.11

Scheduled Caste Total Employment, 1971

General Distribution

It is revealed from the table 4.12 that the scheduled caste employment rate varies from 63.23per cent in Uttar Kashi district to 25.96 per cent in Aligarh district. The whole range in divided into five groups. These groups alongwith their numerical values are as follows:Very High (above 42.95 per cent), High (39.10 per cent to 42.95 per cent), Medium (35.24 per cent to 39.09 per cent), Low (31.93 per cent to 35.24 per cent), Very Low (below 31.93 per cent). The highest employment rate with a range of above 42.95 per cent of total scheduled caste population is observed only in the form of a small compact pocket in the Himalayan zone. The districts falling in this index are Uttar Kashi, Chamoli, Tehri Garhwal and Garhwal. Around fifteen percent districts of the state register high level of total scheduled caste employment rate. These districts are distributed in the eastern plains (Balrampur, Basti and Sultanpur), southern plateau and hill region (Mirzapur, Banda and Fatehpur) and also in Himalayan zone (Pithoragarh and Almora). Medium level of Employment rate is observed in around seventeen percent districts of the state. These districts are mostly confined to the eastern half of the state .A distinct identifiable region of this group runs from east to south and covers the districts Faizabad, Barabanki, Rai Bareilly, Pratapgarh and Allahabad. The other scattered districts of this group are Nainital, Gorakhpur, Deoria and Hamirpur.

Low level of employment rate of total scheduled caste population is noticeable in around thirty percent districts of the state. All the districts in this category are arranged in three groups. One group of two districts Dehradun and Saharanpur in the Himalayan region, second distinct pocket streches from western plains to the eastern plains including Rampur, Badaun, Bareilly, Pilibhit, Kheri, BahraichSitapur, Hardoi, Lucknow, Unnao and Kanpur district. The last group of the same is formed by three eastern districts Ballia, Ghazipur and Varanasi.

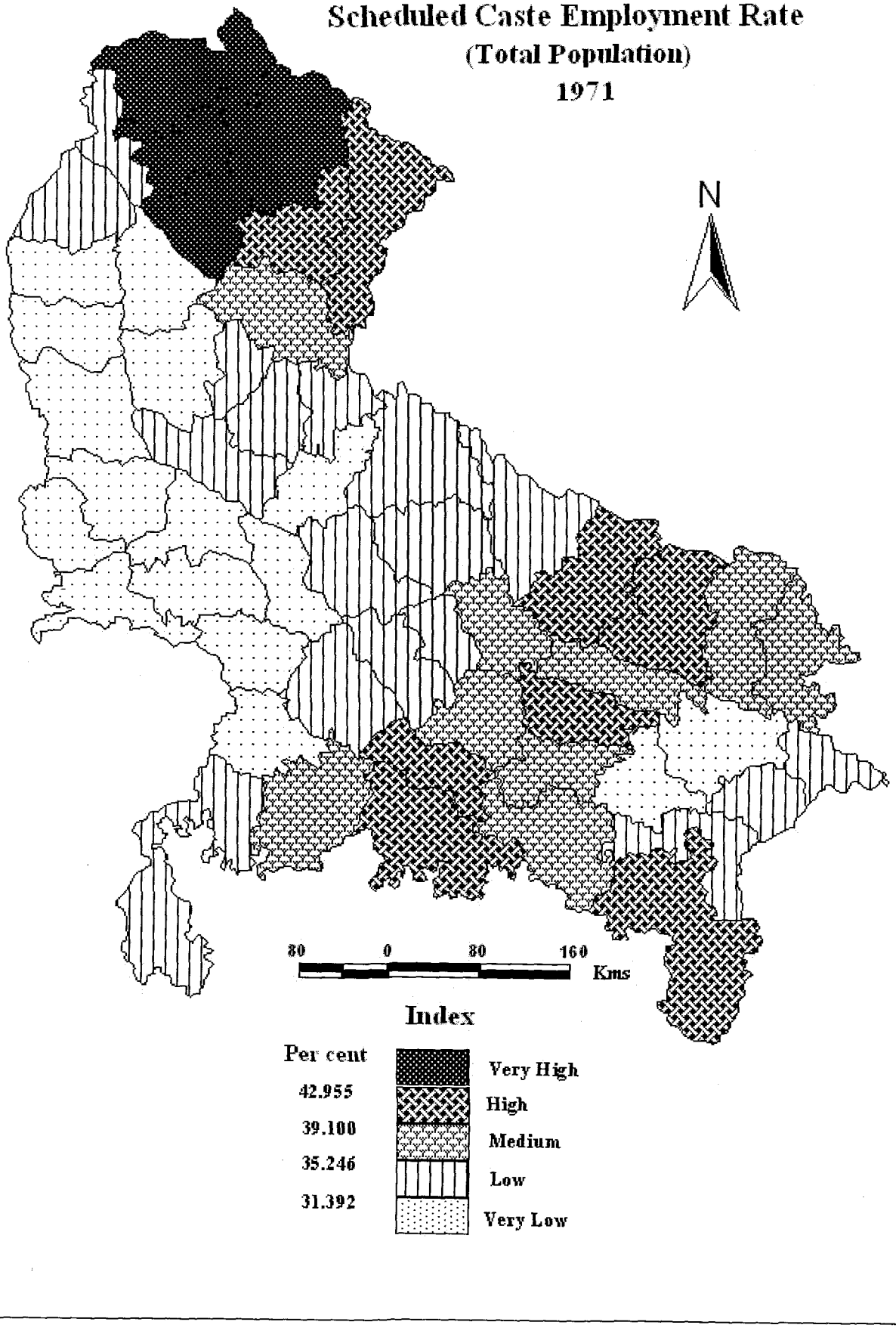
UTTAR PRADESH
Scheduled Caste Employment Rate
(Total Population)
1971
N
80 0 80 160
Kms
Index
Per cent
42.955
39.100
35.246
31.392
Very High
High
Medium
Low
Very Low

Fig. 4.12

Table 4.12 District wise Employment Rate of Scheduled Caste Workers, Uttar Pradesh, 1971

District	Total	Rural	Urban
Uttarkashi	63.23	63.49	46.45
Chamoli	59.26	59.54	50.43
Tehri Garhwal	56.07	56.43	34.29
Garhwal	50.38	51.49	31.32
Pithoragarh	41.49	41.84	27.52
Almora	42.12	42.35	37.54
Nainital	35.73	37.06	26.99
Bijnor	27.91	27.99	26.56
Moradabad	29.26	29.61	26.24
Budaun	32.70	32.91	28.34
Rampur	32.63	32.64	32.39
Bareilly	31.68	32.22	27.44
Pilibhit	32.55	32.76	29.46
Shahjahanpur	30.78	31.00	27.36
Dehra Dun	33.86	39.45	25.08
Saharanpur	34.36	35.15	25.56
Muzaffarnagar	29.76	30.36	22.59
Meerut	29.93	30.78	25.74
Bulandshahar	27.02	27.31	23.60
Aligarh	25.90	26.95	18.59
Mathura	27.02	28.20	14.37
Agra	26.28	28.44	22.15
Etah	25.96	26.04	25.04
Mainpuri	28.71	28.77	27.81
Farrukhabad	30.83	30.90	29.87
Etawah	28.55	28.50	29.42
Kanpur	31.60	32.17	30.32
Fatehpur	40.01	40.22	33.73
Allahabad	38.54	39.74	28.62
Jhansi	32.12	33.22	27.48
Jalaun	30.52	30.81	28.02
Hamirpur	36.36	36.81	30.30
Banda	39.96	40.35	32.51
Kheri	33.19	33.18	33.48
Sitapur	31.86	31.93	27.29
Hardoi	31.97	31.89	34.93
Unnao	32.03	32.06	27.84
Lucknow	33.01	32.40	35.46

Table 4.12 (Continued)

Rae Bareli	35.97	36.07	29.48
Bahraich	33.08	33.08	33.10
Gonda	39.59	39.75	32.92
Barabanki	37.69	37.71	36.16
Faizabad	38.35	38.32	39.22
Sultanpur	40.25	40.32	30.20
Pratapgarh	36.40	36.42	33.48
Basti	42.12	42.29	33.57
Gorakhpur	38.02	38.38	26.15
Deoria	35.35	35.43	30.02
Azamgarh	31.17	31.19	29.86
Jaunpur	30.17	30.16	30.54
Ballia	34.09	34.18	30.47
Ghazipur	33.97	34.18	26.30
Varanasi	32.15	32.09	32.54
Mirzapur	39.78	40.03	34.70
Uttar Pradesh	**33.77**	**53.39**	**11.86**

Source: Census of India, 1971

Very low level of employment rate of total scheduled caste population is observed in thirty percent districts of the state. Except two Paired eastern districts Azamgarh and Jaunpur all the twenty eight districts are arranged in a form of a pocket which runs from west to south. The districts in this group are Muzzafarnagar, Meerut, Bijnor, Moradabad, Bulandshahar, Aligarh, Mathura, Agra, Etah, Mainpuri, Farrukhabad, Shahjahanpur, Etawah and Jalaun.

Rural and Urban Distribution

The distribution pattern of rural scheduled caste employment rate in 1971 does not differ considerably with the pattern of distribution of total scheduled caste employment rate in the same decade (table no 4.12). The five categories of the rural scheduled caste employment against their numerals are as follows. Very High (above 43.39 per cent), High (39.53 per cent to 43.39 per cent), Medium (35.67 per cent to 39.53 per cent), Low (31.82 per cent to 35.676 per cent), Very Low (below 31.82).

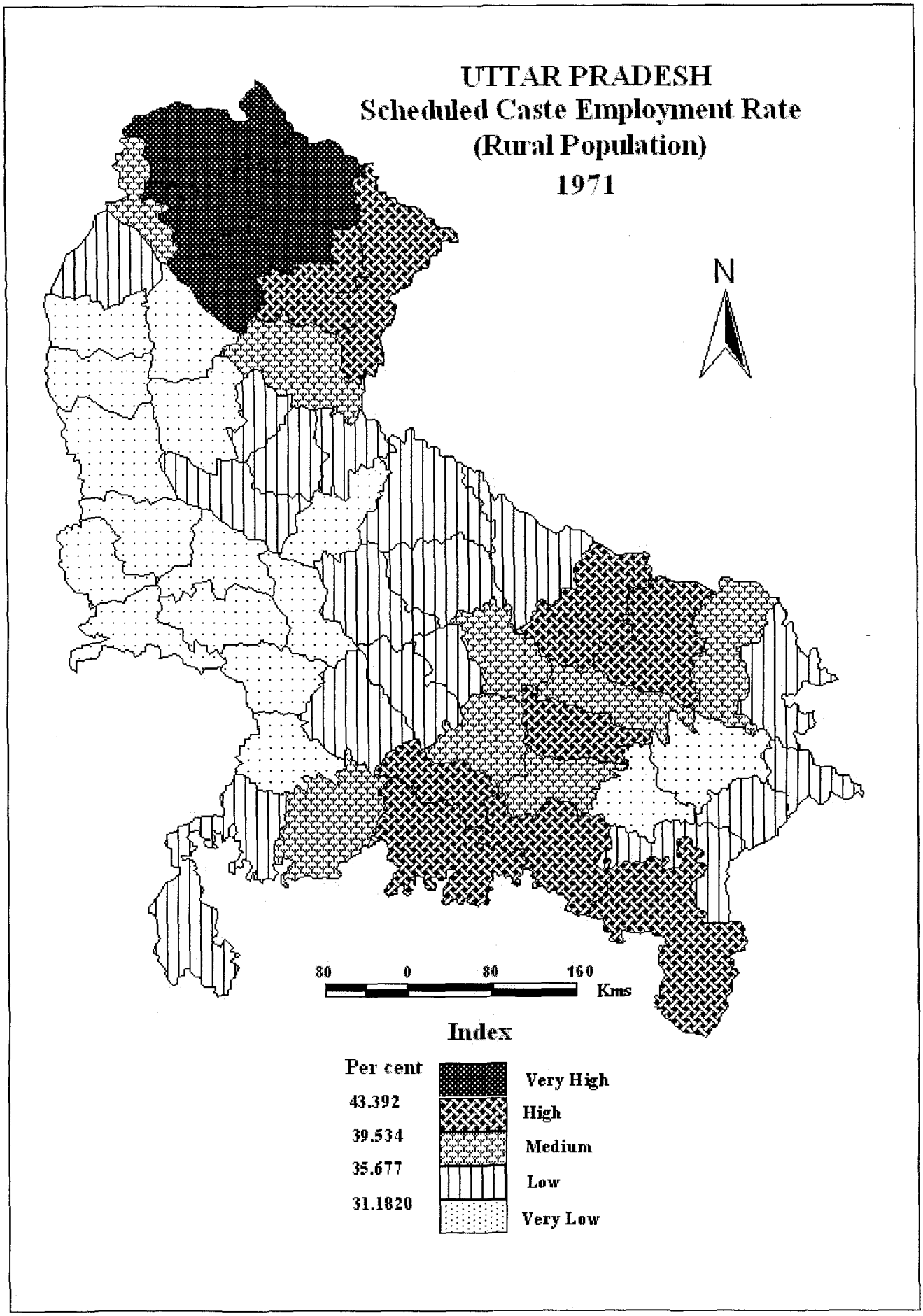
UTTAR PRADESH
Scheduled Caste Employment Rate
(Rural Population)
1971
N
80
0
80
160
Kms
Index
Per cent
43.392
39.534
35.677
31.1820
Very High
High
Medium
Low
Very Low

Fig. 4.13

The regions of very low and very high employment rate of rural scheduled caste population remain the same as for the total scheduled caste population. Only a slight change is observed in rest of the three categories (high, medium and low level of employment rate). High level of employment rate is observed in one-sixth districts of the state out of which four southern districts (Fatehpur, Banda, Chitrakoot and Mirzapur) form a pocket. The other districts of this grade are Almora, Pithoragarh, Balrampur, Basti and Sultanpur.

Medium level of employment rate is observed in around fourteen percent districts of the state. Except a group of eastern plain districts, Faizabad, Barabanki, Rai Bareilly and Pratapgarh all the other districts of this index is sporadically distributed. These districts are Dehradun, Nainital, Gorakhpur, and Hamirpur. The category of low level of employment rate is identified in around thirty percent districts of the state. Except two isolated districts Saharanpur and Jhansi all the other districts are arranged into two pockets. One pocket is composed of four eastern districts Deoria, Ballia, Ghazipur and Varanasi and the other pocket in formed by the districts Etah Rampur, Bareilly, Pilibhit. Kheri, Bahraich, sitapur, Hardoi, Kanpur, Unnao and Lucknow. Fig 4.14 shows that there is considerable shift in the location of the regions of urban scheduled caste employment rate in comparison to rural and total scheduled caste employment rates. The whole range is urban scheduled caste employment rate is occupied by only nine percent districts of the state. These districts are either confined in Himalayan zone (Uttar Kashi, Chamoli and Almore) or in the eastern Uttar Pradesh (Barabanki and Faizabad). The slab of high urban scheduled caste employment is found in around eleven percent districts of the Uttar Pradesh in 1971. No district of this category is found in the Western Plains. In the eastern Plains six districts, Basti, Gonda, Bahraich Kheri, Hardoi and Lucknow form a compact belt, rest of the four districts of this group are widely spaced. These scattered districts are Tehri Garhwal, Fatehpur, Pratapgarh and Mirzapur. Medium level of employment rate of urban scheduled caste population is observed in one-fifth districts of the state. Apart from two scattered districts, all

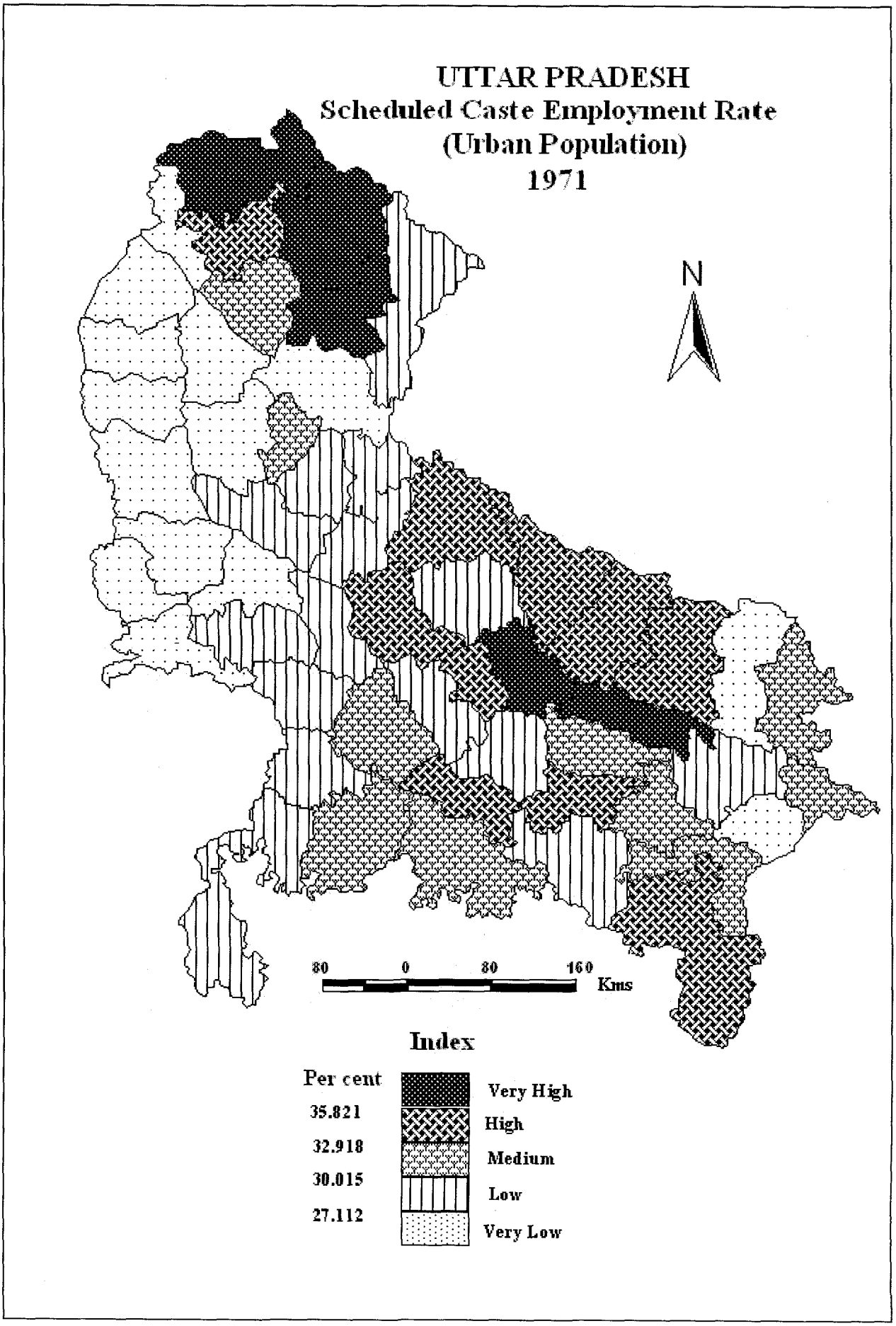
UTTAR PRADESH
Scheduled Caste Employment Rate
(Urban Population)
1971
N
80
0
80
160
Kms
Index
Per cent
35.821
32.918
30.015
27.112
Very High
High
Medium
Low
Very Low

Fig. 4.14

the eight districts are found in the form of three small groups .One group is formed by the two eastern districts Deoria and Ballia, the second group is formed by three district Sultanpur, Jaunpur and Varanasi, the third group is formed by the other three districts Kanpur, Hamirpur and Banda.

Low level of scheduled caste urban employment is found in around thirty one percent districts of the state. Around two third districts of thirty one percent are distributed in the form of a long continuous belt running from western plains to the central plain district. The districts in this belt are Moradabad, Pilibhit, Shahjahnpur, Badaun, Farrukhabad from where the belt turns eastward including the districts Unnao and Rae Bareilly and southward with the districts Etawah, Jalaun and Jhansi. The other scattered districts of this category are Pithorgarh, Sitapur, Allahabad and Azamgarh. The lowest slab of urban scheduled caste employment rate is occupied by around twenty one percent districts of the state. Except two eastern districts Gorakhpur and Ghazipur all the districts of this category form a continuous belt of twelve districts Nainital, Bijnor, Dehradun, Saharanpur, Muzzafarnagar, Meerut Moradabad Buland Shahar, Aligarh Mathura, Agra and Etah.

Scheduled Caste Total Employment, 1981

General Distribution

The employment of total scheduled caste population in the decade 1981 has shown an insignificant decrease from the previous decade. Table no. 4.13 that the distribution of their total employment rate varies from 54.93 percent in Uttarkashi to 27.07 percent in the district Bulandshahr, taking mean as the central value, the whole range of variation is divided into following five grades. Very High (above 37.77 per cent), High (35.16 per cent to 37.77 per cent), Medium (32.56 percent to 75.16 per cent), Low (29.59 to 32.56per cent), Very Low (below 29.95 per cent). The highest employment rate of total scheduled caste people is observed in the Himalayan districts (Uttarkashi, Chamoli, Tehri Garhwal and Pithoragarh) and few southern districts (Banda and Mirzapur). The

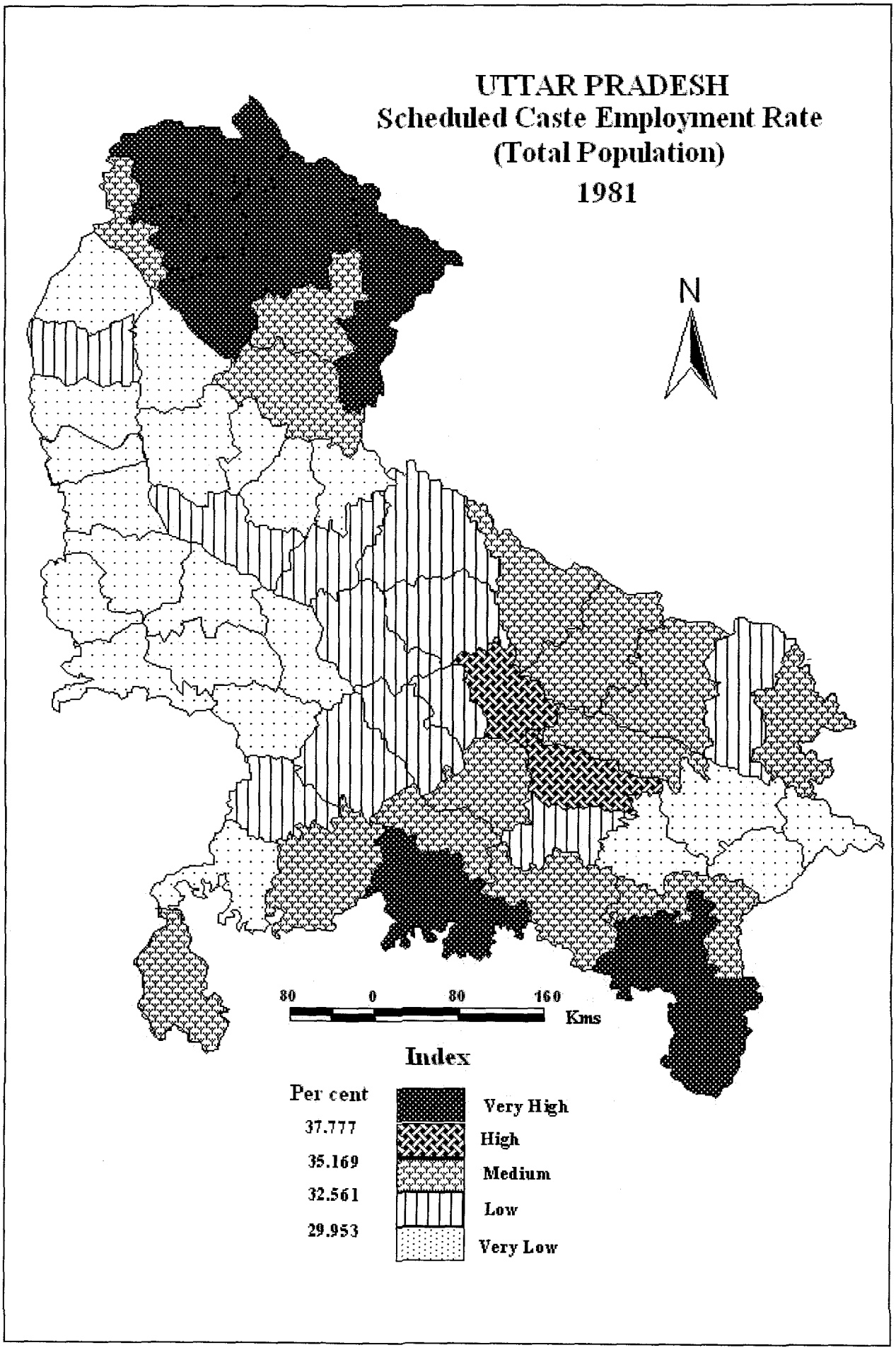
UTTAR PRADESH
Scheduled Caste Employment Rate
(Total Population)
1981
N
80 0 80 160
Kms
Index
Per cent
37.777
35.169
32.561
29.953
Very High
High
Medium
Low
Very Low

Fig. 4.15

Table 4.13 District wise Employment Rate of Scheduled Caste Workers, Uttar Pradesh, 1981

District	Total	Rural	Urban
Uttarkashi	54.93	55.42	42.08
Chamoli	46.06	46.57	40.06
Tehri Garhwal	46.96	47.23	37.70
Dehradoon	33.67	36.40	30.42
Garhwal	37.83	38.81	28.69
Pithoragarh	38.25	38.60	30.23
Almora	32.70	32.71	32.48
Nainital	34.43	35.71	29.42
Saharanpur	29.54	29.59	29.14
Muzaffarnagar	30.46	29.88	34.41
Bijnor	27.82	27.61	30.23
Meerut	27.98	28.11	27.56
Ghaziabad	28.05	28.49	26.95
Bulandshahar	27.07	27.05	27.18
Muradabad	27.37	27.26	28.19
Rampur	29.34	29.36	29.19
Badaun	31.90	32.10	30.18
Bareilly	29.65	30.13	27.09
Pilibhit	29.75	29.79	29.26
Shahjahanpur	31.94	32.33	28.19
Aligarh	27.25	27.32	26.94
Mathura	28.65	28.57	29.13
Agra	28.77	29.11	28.19
Etah	29.07	29.29	27.49
Mainpuri	27.95	28.07	26.79
Farrukhabad	29.56	29.80	27.99
Etawah	27.09	27.08	27.20
Kanpur	29.99	31.01	27.98
Fatehpur	33.93	34.23	29.13
Allahabad	35.16	36.24	27.51
Jalaun	30.00	30.45	27.62
Jhansi	29.75	30.69	27.53
Lalitpur	33.55	33.92	28.68
Hamirpur	34.06	34.90	29.10
Banda	37.93	38.31	33.81
Kheri	31.21	31.23	30.48
Sitapur	31.50	31.49	31.66
Hardoi	30.96	30.99	30.29
Unnao	30.89	31.04	28.27

Table 4.13 (Continued)

Lucknow	31.17	31.87	28.70
Raebareli	34.52	34.74	29.21
Bahraich	34.15	34.24	29.68
Gonda	34.93	35.02	32.29
Barabanki	36.20	36.28	33.48
Faizabad	32.60	32.68	31.08
Sultanpur	35.48	35.59	28.38
Pratapgarh	31.94	32.04	27.79
Basti	34.24	34.37	30.45
Gorakhpur	31.46	31.72	26.72
Deoria	33.64	33.82	29.43
Azamgarh	29.10	29.04	30.44
Jaunpur	28.85	28.84	29.22
Ballia	29.14	29.28	26.83
Ghazipur	28.67	28.69	28.32
Varanasi	32.60	33.27	28.46
Mirzapur	41.81	42.27	32.71
Uttar Pradesh	**32.56**	**32.86**	**29.77**

Source: Census of India, 1981

second grade of high level of employment rate of total scheduled caste people is observed in only two districts i.e. Barabanki and Sultanpur.

Twenty five percent districts contribute in the category of medium level of total scheduled caste employment rate. These districts form two small identifiable regions with three isolated districts. One pocket of this grade is constituted by the four eastern districts Bahraich, Gonda, Basti and Faizabad. The second region is formed by the southern districts Hamirpur, Fatehpur, Rai Bareilly, Allahabad and Varanasi.

Low level of scheduled caste total employment is observed in twenty one percent districts of the state which are mostly concentrated in the central part of the state in the form of a continuous pocket. The districts of this belt are Badaun, Shahjahanpur, Kheri, Sitapur, Hardoi, Lucknow, Unnao, Kanpur and Jalaun. Very low level of employment rate of total scheduled caste people is observed mostly in the western part of the state. The districts of big western discontinuous

patch are Saharanpur, Bijnor, Meertu, Moradabad, Rampur, Bareilly, Pilibhit, Ghaziabad, Bulandshar, Aligarh, Mathura, Agra, Etah, Mainpuri, Etawah and Farrukhabad. One smaller region of this grade at the eastern margin is formed by the districts Ballia, Azamgarh, Ghazipur and Jaunpur.

Rural and Urban Distribution

The distributional pattern of rural employment rate of scheduled caste people is quite similar to the distributional pattern of total scheduled caste population. It varies from 55.42 percent in the district Uttarkashi to 27.05 percent in the district Buland Shahar. This whole range of index is divided into following five groups: (as shown in the fig 4.16) Very High (above 38.22 per cent), High (35.54 per cent to 38.22 per cent), Medium (32.86 per cent to 35.54 per cent), Low (30.19 per cent to 32.86 per cent) and Very Low (below 30.19 per cent)

The category of very high employment rate is constituted by a pocket of five Himalayan districts (Uttar Kashi, Chamoli, Garhwal, Tehri-Garhwal, Pithogarh) and two southern districts (Banda and Mirzapur). The high employment rate of scheduled caste is found in only five scattered districts.

The third category of Medium level of rural employment rate is found in one-sixth districts of the state. Two small identifiable regions of three eastern districts (Bahraich, Gonda and Basti) and three southern districts (Hamirpur, Fatehpur and Rai Barelly) are observed for the medium grade.

The rural employment rate of low grade is observed in twenty five percent districts of the state, majority of which form a continuous pocket. The pocket runs from Badaun in the west through Shahjahanpur, Kheri, Sitapur, Hardoi, Lucknow, Unnao, Kanpur, Jalaun till the Jhansi in the south.

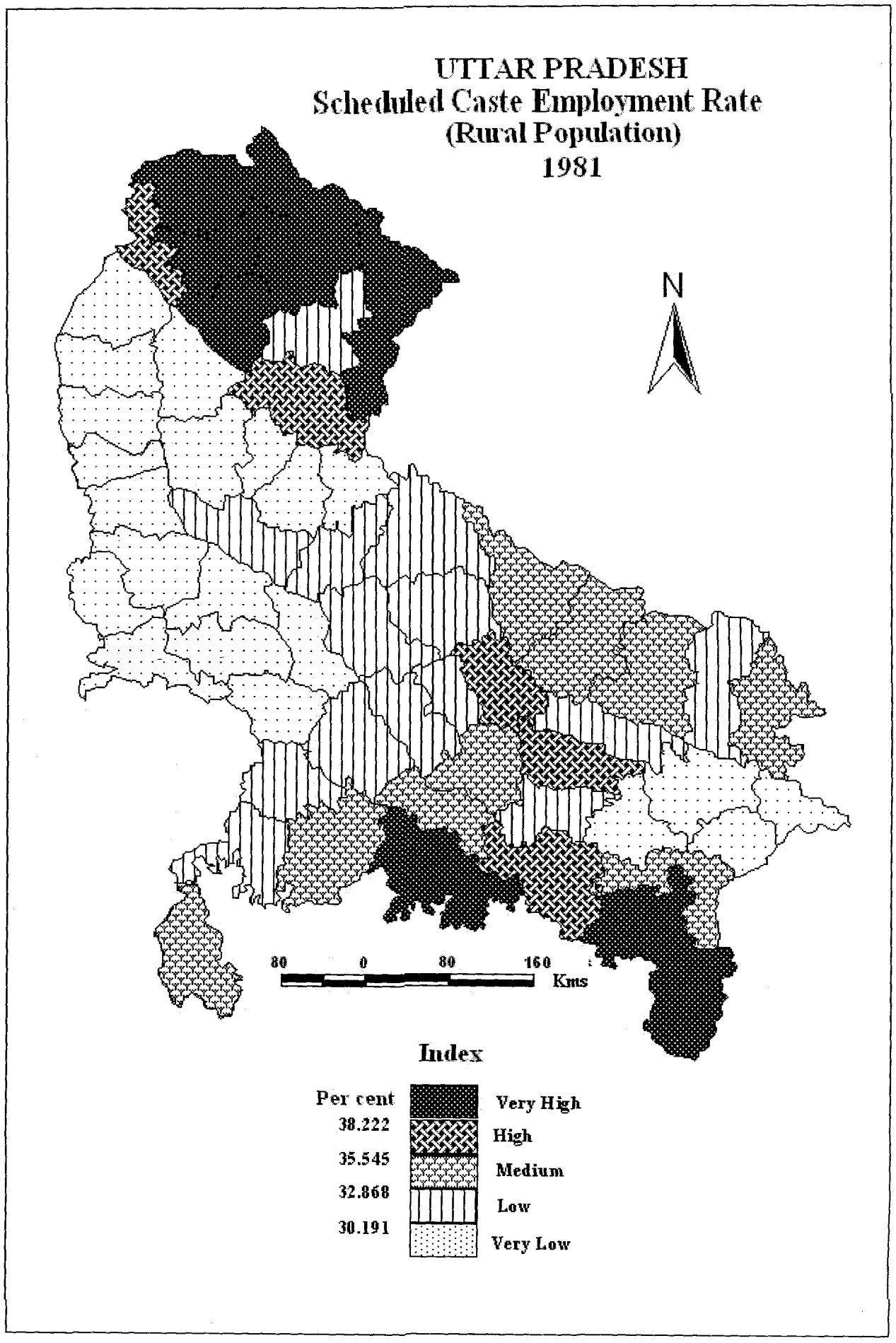
UTTAR PRADESH
Scheduled Caste Employment Rate
(Rural Population)
1981
N
80 0 80 160
Kms
Index
Per cent
38.222
35.545
32.868
30.191
Very High
High
Medium
Low
Very Low

Fig. 4.16

Very low employment rate of rural scheduled caste is mostly confined in the western half of the state with an exception of a small pocket of four districts Ballia, Azamgarh, Jaunpur and Ghazipur in the east. The Western districts of this pocket are forming a discontinuous patch of the seventeen districts (Saharanpur, Bijnor, Muzaffarnagar, Meerut Ghaziabad, Bulandshahar, Moradabad, Bareilly, pilibhit, Aligarh, Mathura, Agra, Etah, Mainpuri, Farrukhabad and Etawah).

Table no. 4.13 shows that the urban employment rate of scheduled caste varies from 42.08 percent in the district Uttarkashi to 26.49 percent in the district Etah. The five categories of this whole range of index are Very High (above 32.861 per cent), High (31.32 per cent to 32.86 per cent), Medium (29.77 per cent to 31.31 per cent), Low (28.23 per cent to 29.77 per cent) and Very Low (below 28.23 per cent).

The identifiable region of the category of very high level of urban employment rate in the decade 1981 is composed of three Himalayan districts (Uttar Kashi, Chamoli and Garhwal) whereas rest of the three districts of the same grade are widely spaced. The second slab in the hierarchal order of urban scheduled caste employment rate is observed in only four districts which do not form any recognizable region.

Medium level of urban scheduled caste employment is seen in nine districts which are either forming tiny regions or they are widely spaced. Among the three tiny region of this grade, one is consisted of two districts (Dehradun and Bijnor), the other is formed by two central districts (Kheri and Hardoi) and the third pocket is composed of the three eastern districts (Basti, Faizabad and Azamgarh).

Thirty percent districts of the state contribute to the category of low level of urban scheduled caste employment rate. Majority of these districts are arranged in two patches of different sizes. The first patch is formed by the districts

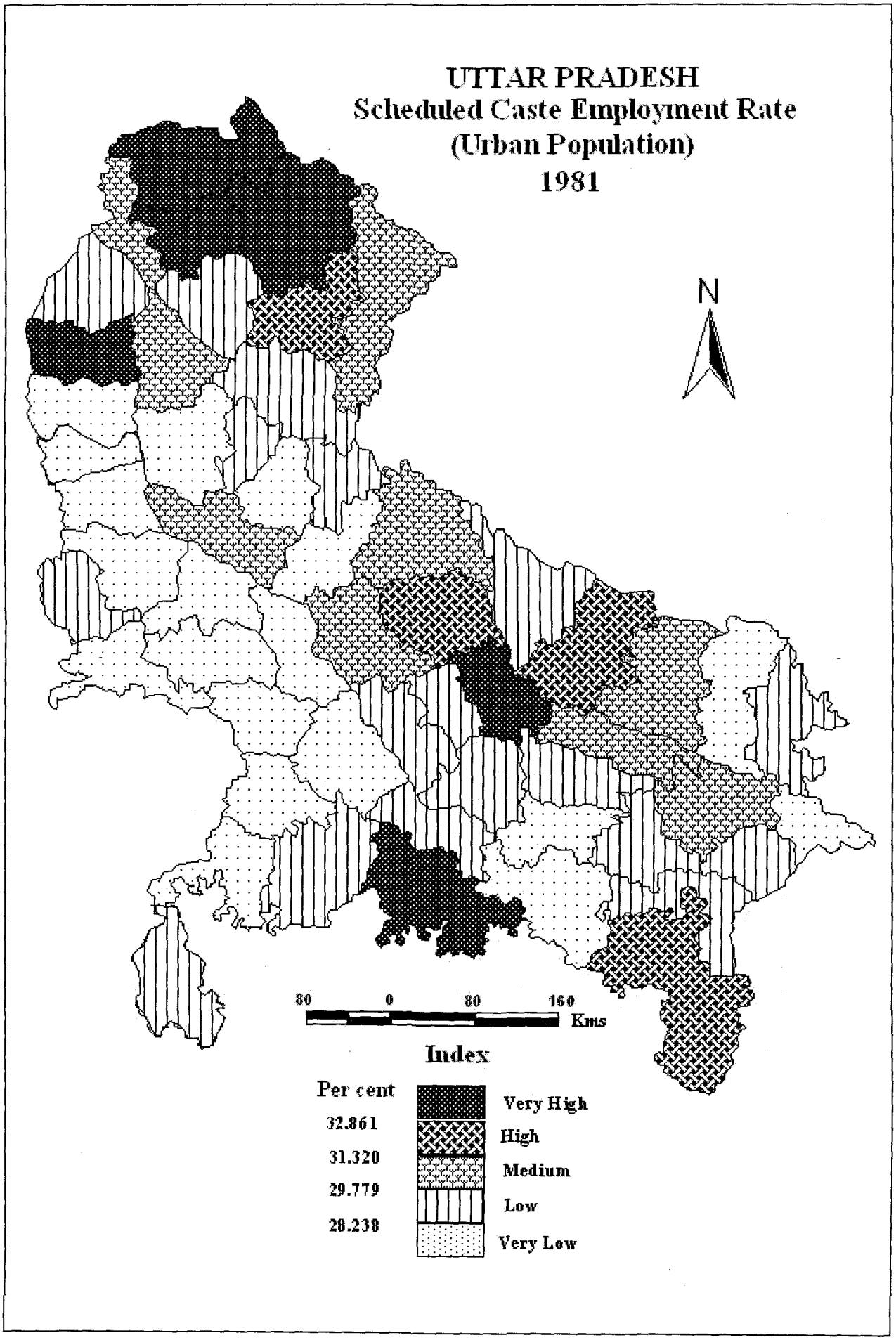
UTTAR PRADESH
Scheduled Caste Employment Rate
(Urban Population)
1981
N
80
0
80
160
Kms
Index
Per cent
32.861
31.320
29.779
28.238
Very High
High
Medium
Low
Very Low

Fig. 4.17

Tehri Garhwal, Nainital, Rampur and Pilibhit. The big second patch includes the districts of central, south eastern and south western part of the state.

The category of low urban scheduled caste employment rate is identified in thirty five percent districts of the state. They are mostly arranged in the form of discontinuous region running from western part to the south eastern part with the larger share of western districts.

Scheduled Caste Total Employment, 1991

General Distribution

There are 35.29 percent workers in the state during 1991 whereas in 1981 the percentage of total workers is 33.60 percent thus an increase of more than half percent is observed in the decade 1991. This distribution of the total employment rate is arranged in five grades as shown in figure 4.18.

A continuous region of very high rates of employment is found in the Himalayan zone. These districts against their employment rate are Uttar Kashi (50.17 per cent), Tehri Garhwal (40.42 per cent), Chamoli (43.04 per cent), Almora (40.84 per cent) and Pithoragarh (38.70 per cent). Remaining five districts Maharajganj Barabanki, Banda, Mirzapur and Sonbhadra of this range are scattered.

Six districts of the state lie in the grade of high employment rate. These districts are distributed in the form of pockets of three eastern districts, Bahraich, Gonda, Sidharthnagar and three southern districts Hamirpur, Fatehpur and Chitrakoot

The medium level of employment rate of scheduled caste is identified in around seventeen percent districts of the state except two isolated districts, Lalitpur and Varanasi , all the other districts of this grade are distributed in the form of two compact belts. One belt is found in the Himalayan zone constituted by the districts Dehradun, Garhwal, Nainital. This belt runs adjacent to the pocket of high level of employment rate. The other belt of this grade is formed by the

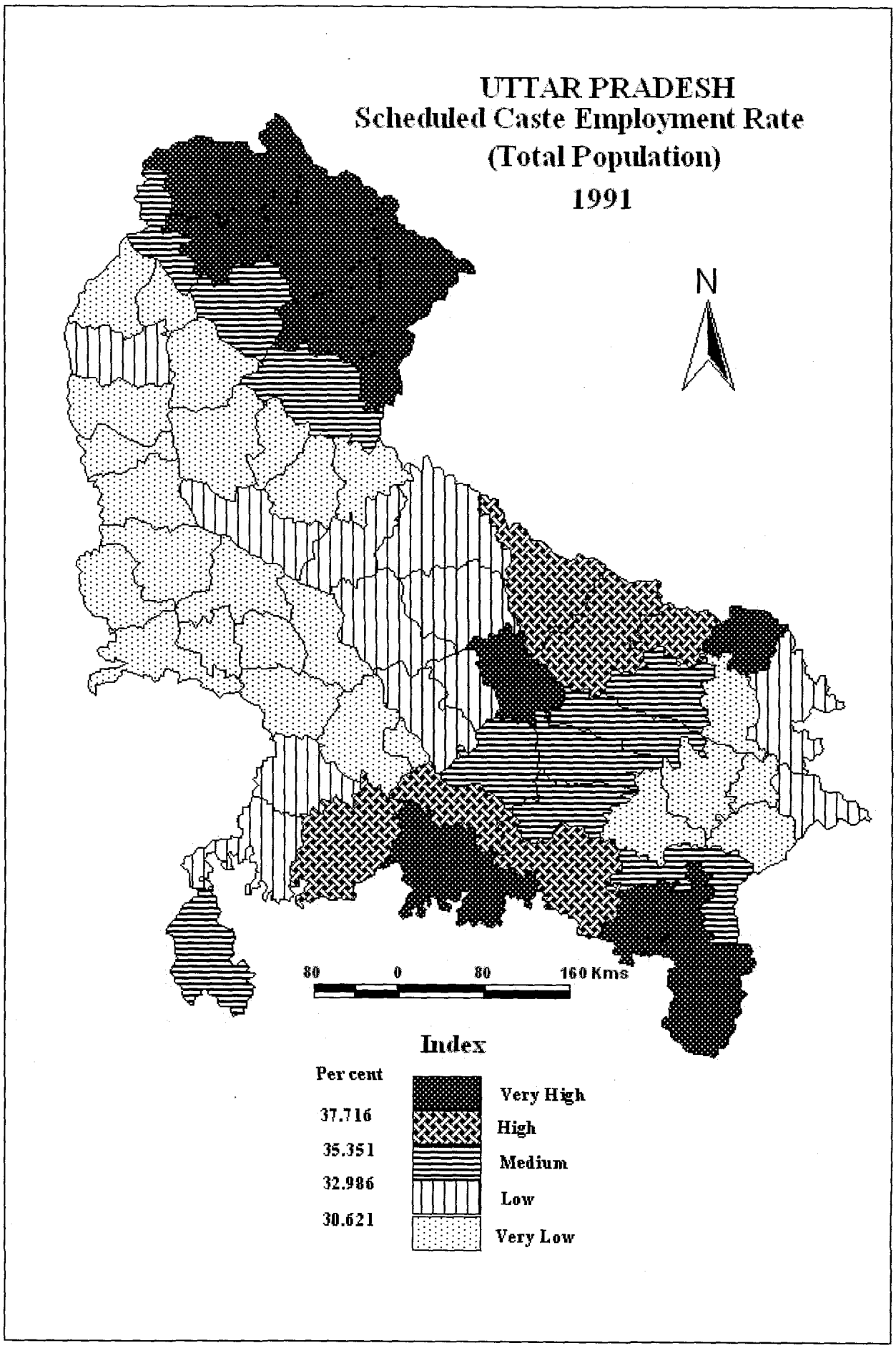
UTTAR PRADESH
Scheduled Caste Employment Rate
(Total Population)
1991
N
80 0 80 160 Kms
Index
Per cent
37.716
35.351
32.986
30.621
Very High
High
Medium
Low
Very Low

Fig. 4.18

districts Basti, Faizabad, Sultanpur Pratpgarh, Rae Bareilly and runs from north east to south east to join the two pockets of high grade of employment rate.

The belt of low level of total employment rate of scheduled caste is found in nineteen percent districts of the state. Seven districts Badaun, Sahjahanpur, Kheri, Sitapur, Hardoi, Lucknow and Unnao of this grade form a compact pocket in central plains. The other districts of this grade are Muzzafarnagar, Deoria, Ballia, Jalaun and Jhansi. Very low level of total employment rate of scheduled caste is seen in around forty percent districts of the state which are mostly confined in western part of the state. These districts are distributed in the

Table 4.14 District wise Employment Rate of Scheduled Caste Workers, Uttar Pradesh, 1991

District	Total	Rural	Urban
Uttarkashi	50.17	50.89	33.23
Chamoli	43.04	43.92	33.60
Tehri Garhwal	40.42	40.73	33.02
Dehradoon	34.52	38.88	28.93
Garhwal	33.11	33.79	26.45
Pithoragarh	38.78	39.31	29.99
Almora	40.84	41.30	31.32
Nainital	34.92	36.71	28.99
Bijnor	28.13	28.17	27.77
Moradabad	28.24	28.38	27.40
Rampur	29.56	29.75	27.50
Saharanpur	30.51	30.84	27.86
Hardwar	30.02	30.52	27.27
Muzaffarnagar	32.77	33.26	30.16
Meerut	28.93	30.05	26.48
Ghaziabad	26.99	27.11	26.81
Bulandshahar	26.90	26.91	26.81
Aligarh	28.20	28.43	27.23
Mathura	28.43	28.68	27.18
Agra	28.33	28.78	27.74
Firozabad	27.72	27.81	27.43
Etah	29.09	29.35	27.40
Mainpuri	27.48	27.82	24.67
Badaun	30.96	31.29	28.44

Table 4.14 (Continued)

Bareilly	29.34	29.96	26.52
Pilibhit	29.65	29.87	27.52
Shahjahanpur	32.02	32.71	26.37
kheri	32.12	32.23	29.23
Sitapur	32.51	32.60	30.27
Hardoi	32.19	32.30	29.39
Unnao	32.48	32.83	27.64
Lucknow	31.90	33.85	27.47
Rae Bareli	35.30	35.70	27.44
Farrukhabad	29.77	30.03	28.21
Etawah	28.08	28.28	26.25
Kanpur Dehat	29.04	30.95	29.30
Kanpur Nagar	27.80	31.04	26.41
Jalaun	31.07	31.90	27.26
Jhansi	31.94	34.34	26.97
Lalitpur	35.08	35.75	27.32
Hamirpur	36.19	37.19	30.32
Banda	40.89	41.73	32.72
Fatehpur	35.99	36.43	29.34
Pratapgarh	34.01	34.19	27.76
Allahabad	37.48	38.74	27.31
Bahraich	36.12	36.27	30.92
Gonda	37.07	37.30	29.32
Barabanki	38.19	38.33	33.41
Faizabad	33.93	34.25	27.46
Sultanpur	35.03	35.14	29.67
Siddharthnagar	37.46	37.63	29.91
Maharajgang	38.10	38.37	30.67
Basti	33.35	33.64	26.83
Gorakhpur	30.15	30.81	24.80
Doria	31.77	31.94	27.76
Mau	30.24	30.42	27.33
Azamgarh	28.80	28.88	26.50
Jaunpur	28.77	28.89	25.13
Ballia	30.67	30.83	27.85
Ghazipur	29.96	30.18	24.16
Varanasi	33.88	34.98	27.18
Mirzapur	38.77	39.44	30.08
Sonbhadra	42.99	43.52	29.50
Uttar Pradesh	**27.56**	**11.87**	**33.05**

Source: Census of India, 1991

Two pockets, one smaller pocket in the east is constituted by the districts Gorakhpur, Azamgarh, Mau, Jaunpur and Mirzapur, the other big pocket of this slab is formed by around one third districts of the state. This big pocket covers Saharanpur and passes through Hardwar and Bijnor from where it turns into two direction, one eastward with the districts Moradabad, Rampur, Bareilly and Pilibhit, whereas, the other in southward direction to include the districts Muzzafarnagar, Ghaziabad, Bulandshahar, Aligarh, Mathura, Agra, Etah, Farrukhabad, Mainpuri, Firozabad, Etawah ,Kanpur Dehat and Kanpur Nagar.

Rural and Urban Distribution

The employment rate of rural scheduled caste population is 34.19 percent, which is pushed to 36.22 percent in 1991. The inter district variations of rural scheduled caste employment rate may be arranged into five grades and these grades are showing almost similar distribution as to that of the general distribution with few exceptions. However the graded distribution of rural employment rate as depicted in fig 4.19 is discussed below.

Very high level of scheduled rural employment rate which is above 38.43 percent is found in fifteen percent districts of the state. These districts are arranged in the form of two belts, one in Himalayan zone with the districts Dehradun, Uttar Kashi Tehri Garhwal, Chamoli, Almora and Pithoragarh and the other in southern part of the state including the districts Banda, Chitrakoot Allahabad and Sonbhadra.

The second slab of high level of employment rate is observed in one-ninth districts of the state. Majority of the districts of this grade are distributed in the form of a pocket in eastern part of the state with the districts Bahraich, Barabanki, Gonda, Sidharthnagar and Maharajgunj, rest of the three scattered districts of this pocket are Nainitaal, Hamirpur and Fatehpur. Medium level of rural scheduled caste employment rate is found in fifteen percent districts of the

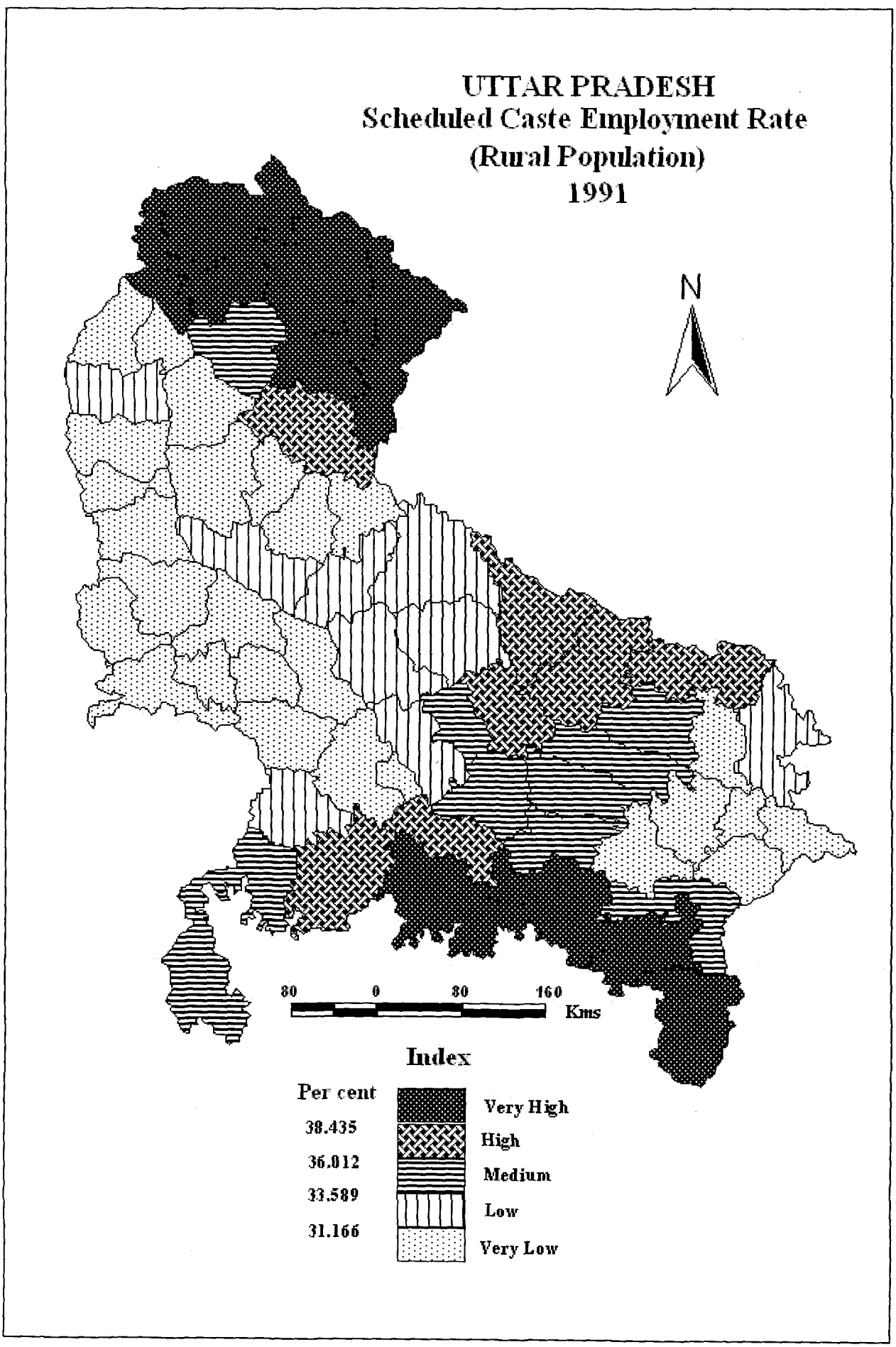
UTTAR PRADESH
Scheduled Caste Employment Rate
(Rural Population)
1991
N
80 0 80 160
Kms
Index
Per cent
38.435
36.012
33.589
31.166
Very High
High
Medium
Low
Very Low

Fig. 4.19

state. Apart from it four sporadically distributed districts are Garhwal, Lalitpur Jhansi and Varanasi, all the other six districts Lucknow, Rai Bareilly, pratapgarh, Sitapur, Faizabad and Basti form a compact belt. The category of low level of rural scheduled caste employment rate is observed in twenty five percent districts of the state. Six districts Unnao, Hardoi, Sitapur, Shahjahanpur and Badaun among them form a compact belt whereas three districts, Deoria, Mazzafarnagar and Jalaun are widely spaced. In the category of very low level scheduled caste rural employment rate, forty one percent districts of the state fall. They form two belts, one smaller belt in the east with the districts Gorakhpur, Mau, Ballia, Ghazipur, Jaunpur and Azamgarh, the other belt start from Saharanpur and runs through Hardwar get folked from Bijnor. One branch runs east ward with its component districts Moradabad, Rampur Barielly and Pilibhit the other of this belt runs southward, with the districts, Muzafarnagar, Ghaziabad, Buland shahar, Aligarh, Mothura, Etah, Agra Firozabad, Mainpuri, Etawah, Farrukhabad Kanpur Dehat and Kanpur Nagar.

In case of urban scheduled caste, the range of employment rate is quite narrow as compared to the previous two figures of the same year 1991. The whole index is divisible into five groups of, Very High (above 30.40 per cent) High (29.35 per cent to 30.40 per cent), Medium (28.30 per cent to 29.353 per cent), Low (27.25 per cent to 30.50 per cent) and Very Low (below 27. 256 per cent) as shown in the fig 4.20.

The very high employment rate of urban scheduled caste population is observed in around one-eirth districts of the state. Four districts Uttar Kashi, Tehri Garhwal, Chamoli and Almora of Himalayan zone in this grade form a compact pocket. Rests of the sporadically distributed districts of the same grade are Bahraich, Barabanki, Maharajganj and Banda. The districts of high grade of urban scheduled caste employment are showing irregular distribution. These districts are Pithoragarh, Muzzafarnagar, Hardoi, Sitapur, Sidharthnagar,

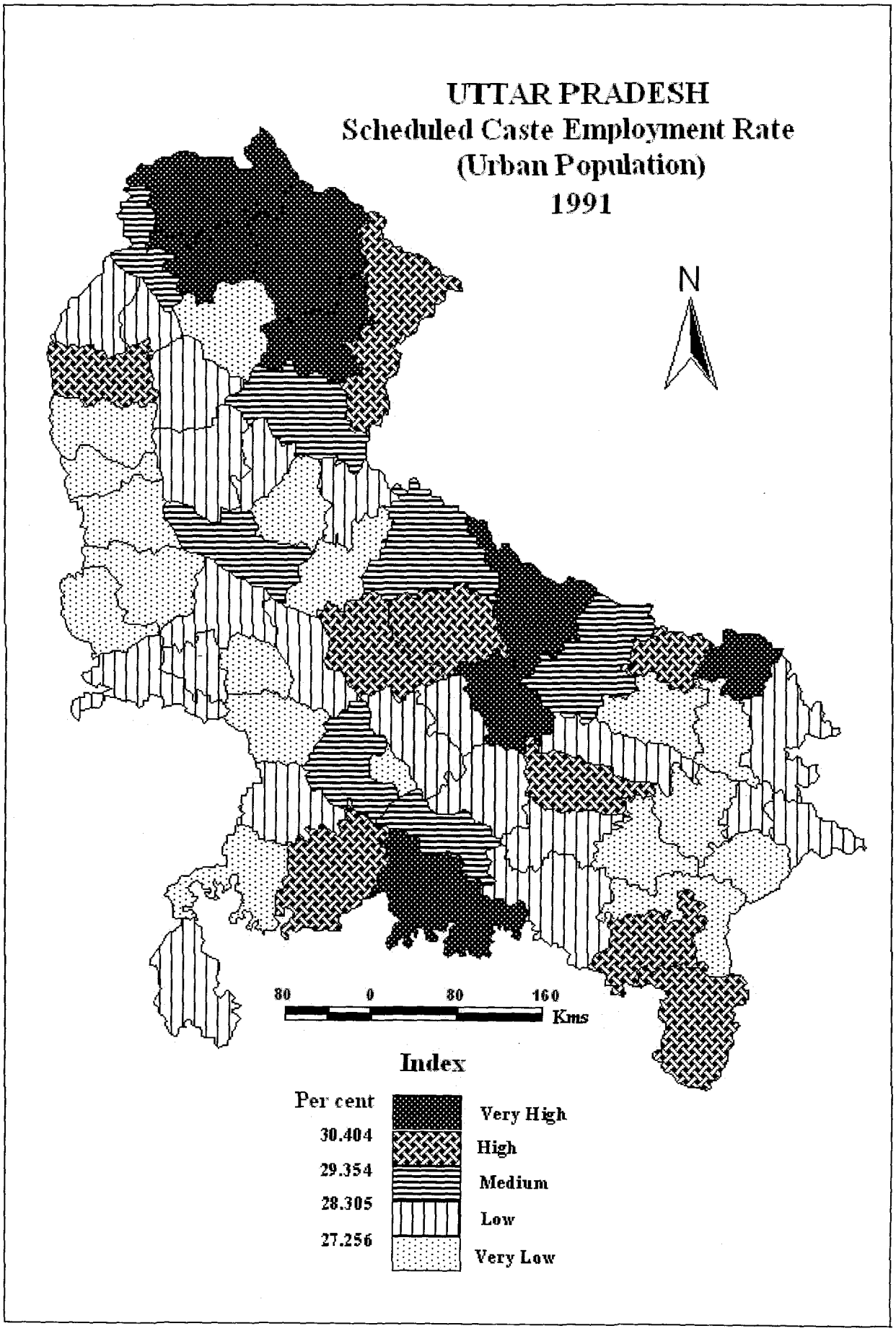
UTTAR PRADESH
Scheduled Caste Employment Rate
(Urban Population)
1991
N
80 0 80 160
Kms
Index
Per cent
30.404
29.354
28.305
27.256
Very High
High
Medium
Low
Very Low

Fig. 4.20

Faizabad Hamirpur, Mirzapur and Sonbhadra. The districts in this grade account for around fourteen percent districts of the whole state. Medium grade of scheduled caste urban employment rate does not show any identifiable region. Around eleven percent districts of the Uttar Pradesh contribute to this category and they are Dehradun, Nainital Badaun, Kheri, Gonda, Kanpur Dehat and Fatehpur. Low level of employment rate is observed in one-third districts of the state. Except four isolated districts Pilibhit, Faizabad Jalaun and Lalitpur, all the other districts of this category are distributed into four smaller pockets. One in eastern part, two in western part and the forth runs from central to southern part. The districts of eastern pocket are Deoria, Mau and Ballia, the first western belt is having the districts Saharanpur, Hardwar, Bijnor, Moradabad and Rampur and the second western pocket encompasses the districts Agra, Firozabad, Etah and Farrukhabad the forth pocket includes the districts Lucknow, Unnao, Rae Bareilly, Pratapgarh and Allahabad.

The category of very low level of employment rate is represented by eighteen percent districts of the state. Among the two identifiable regions of this slab, the eastern pocket comprised of the districts Basti, Gorakhpur, Azamgarh, Jaunpur, Ghazipur and Varanasi, whereas, western pocket comprised of the districts Meerut, Ghaziabad, Bulandshahar, Aligarh and Mathura. The other districts of the same grade are Garhwal, Bareilly, Shahjahnpur, Mainpuri, Etawah, Kanpur Nagar and Jhansi.

Scheduled Caste Total Employment, 2001

General Distribution

Total employment rate of scheduled caste has declined from 35.29 percent in 1991 to 34.70 percent in 2001. Table no. 4.15 reveals that the total employment rate of scheduled caste population varies from 47.40 Per cent in Balrampur to 27.10 in Agra district. In the year 2001, the general employment rate of scheduled caste population has been

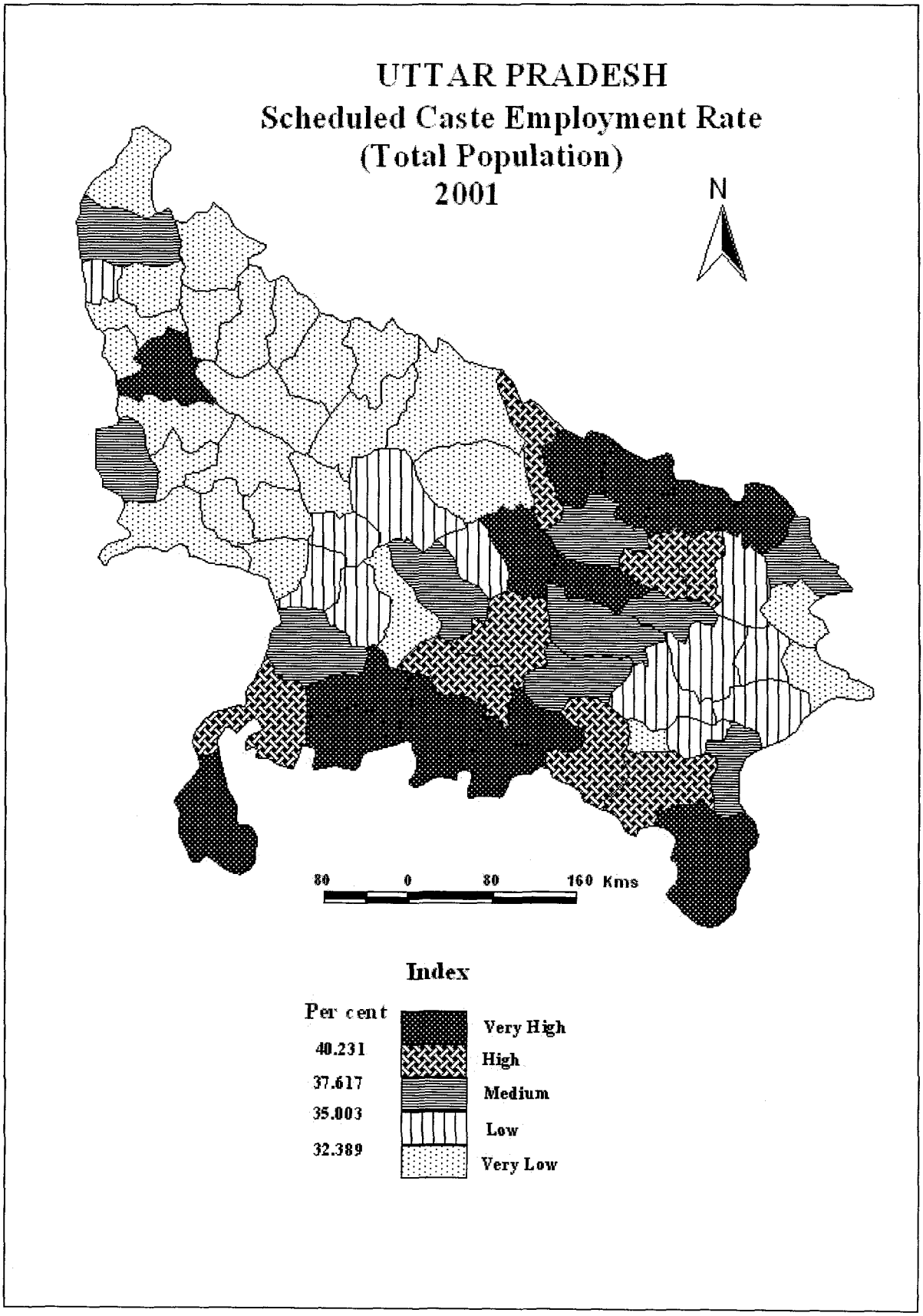
UTTAR PRADESH
Scheduled Caste Employment Rate
(Total Population)
2001
N
80 0 80 160 Kms
Index
Per cent
40.231
37.617
35.003
32.389
Very High
High
Medium
Low
Very Low

Fig 6.21

divided into five grades of Very high, High, Medium, Low and Very Low. The scheduled caste employment rate of very high grade (above 40.23 per cent) is observed in one-fifth districts of the state. Except Bulandshahar (with 90 percent employment rate), no other district of either very high or high level of total scheduled employment rate is found in western Uttar Pradesh .The districts of very high total scheduled caste employment rate are found in the form of two smaller regions, one is eastern Uttar Pradesh with its constituent districts of Shrawasti, Balrampur, Sidharthnagar and Maharajgang and the other in southern part of the state with the constituent districts of Hamirpur, Mahoba, Banda, Chitrakoot and Kaushambi. The other districts of this grade are Buland Shahar, Barabanki Faizabad, Sonbhadra and Lalitpur.

The high level (37.61 per cent to 40.23 per cent) of total employment rate of scheduled caste population is observed in fourteen percent districts of the state which don't form any identifiable region .The districts of this grade are Bahraich, Basti, Sant Kabir Nagar, Rai Bareilly, Fatehpur, Jhansi, Allahabad and Mirzapur.

Medium level of employment rate is found in one-seventh districts of the state. Except a smaller belt of three eastern districts (Ambedkar Nagar, Sultanpur and Pratapgarh) all the other districts of this category are widely spaced. These districts are Kushinagar, Chandauli, Gonda, Unnao, Jalaun, Mathura and Muzaffar Nagar.

Low level of total employment rate of scheduled caste people is found in sixteen percent districts of the state. Except Baghpat, all the other districts in this group are arranged in the form of two pockets. One lies eastern part and comprises of the districts Gorakhpur, Mau, Azamgarh, Jaunpur, Varanasi and Ghazipur ,the other central pocket of the same group includes the districts Lucknow, Hardoi, Kannauj, Auraiya and Kanpur Dehat. Very low level of employment rate is found around thirty seven percent districts of the state .A very large pocket of this category is found in western Uttar Pradesh including the districts Baghpat,

Table 4.15 District wise Employment Rate of Scheduled Caste Workers, Uttar Pradesh, 2001

District	Total	Rural	Urban
Saharanpur	29.30	29.63	26.93
Muzaffarnagar	35.20	36.27	29.41
Bijnor	28.90	29.25	25.15
Moradabad	31.90	33.31	25.62
Rampur	28.20	28.39	25.93
Jyotiba Phule Nagar	31.00	31.82	25.88
Meerut	30.50	33.89	25.62
Baghpat	32.80	33.76	27.51
Ghaziabad	28.60	31.46	25.99
Gautam Buddha Nagar	28.70	28.58	29.03
Bulandshahar	41.80	43.61	30.35
Aligarh	30.90	32.19	26.31
Hathras	29.30	29.60	28.02
Mathura	36.70	38.91	27.75
Agra	27.10	28.39	25.51
Firozabad	27.60	27.39	28.29
Etah	28.40	28.83	25.43
Mainpuri	27.30	27.94	22.85
Budaun	29.90	30.36	26.88
Bareilly	30.50	31.62	25.85
Pilibhit	28.40	28.70	25.20
Shahjahanpur	29.50	29.98	25.69
Kheri	32.40	32.55	28.02
Sitapur	32.40	32.56	27.27
Hardoi	33.80	34.03	27.83
Unnao	36.30	36.93	27.78
Lucknow	32.40	34.70	27.52
Rae Bareli	39.10	39.70	27.26
Farrukhabad	29.00	29.60	26.43
Kannauj	33.10	33.65	28.63
Etawah	27.70	28.24	24.47
Auraiya	34.10	34.84	25.62
Kanpur Dehat	33.80	34.17	26.96
Kanpur Nagar	32.20	36.01	27.83
Jalaun	37.40	39.59	28.12
Jhansi	38.50	42.73	29.87
Lalitpur	45.40	46.66	31.61

Table 4.15 (Continued)

Hamirpur	40.50	42.28	30.88
Mahoba	43.60	46.05	31.67
Banda	43.20	45.04	29.90
Chitrakoot	44.30	45.42	29.59
Fatehpur	39.70	40.42	27.92
Pratapgarh	36.90	37.14	26.64
Kaushambi	41.70	41.98	35.07
Allahabad	37.70	39.49	27.40
Barabanki	40.90	41.20	32.27
Faizabad	44.00	44.79	30.37
Ambedkar Nagar	36.30	36.58	29.08
Sultanpur	37.20	37.45	27.91
Bahraich	38.20	38.61	27.10
Shravasti	44.90	44.98	32.15
Balrampur	47.40	48.03	30.49
Gonda	37.10	37.46	27.13
Siddharthnagar	41.60	41.92	28.09
Basti	38.10	38.50	27.31
Sant Kabir Nagar	38.10	38.48	30.19
Maharajganj	41.30	41.75	29.35
Gorakhpur	33.00	34.11	24.31
Kushinagar	37.10	37.32	27.21
Deoria	31.50	31.99	24.25
Azamgarh	33.40	33.65	25.48
Mau	33.50	33.86	29.26
Ballia	31.00	31.28	26.72
Jaunpur	34.00	34.24	25.43
Ghazipur	34.00	34.34	25.12
Chandauli	35.90	36.74	24.66
Varanasi	33.00	34.60	27.92
Sant Ravidas Nagar	31.60	31.90	26.79
Mirzapur	38.40	39.02	29.56
Sonbhadra	40.80	41.78	25.21
Uttar Pradesh	**34.7**	**35.8**	**27.10**

Source: Census of India, 2001

Ghaziabad Meerut, Bijnor, Jyotiba Phule Nagar, Moradabad, Badaun, Rampur, Bareilly, Philibhit, Shahjahanpur form where it turns in the two direction, one in eastern direction which reaches to Sitapur through Kheri, and in western

direction in passes through Farrukhabad, Etah, Aligarh, Hathras Agra, Firozabad Mainpuri and Etawah districts. Apart from this continuous zone, the other scattered districts of this category are Saharanpur, Kanpur Nagar, Deoria and Ballia.

Rural and Urban Distribution 2001

The rural employment rate of scheduled caste population has declined from 36.22 percent in 1991 to 35.8 percent in the year 2001.This distributional pattern of rural scheduled caste employment rate which is quite similar to the regional pattern of total scheduled caste employment rate is explained by dividing the whole range of employment into five different grades of Very High (above 41.29 per cent), High (38.59 per cent to 41.29 per cent), Medium (35.88 per cent to 18.58 per cent), Low (33.18 per cent to 35.88 per cent) , Very Low (below 33.18 per cent) as shown in the fig 4.22.

In the group of very high rate of rural scheduled caste employment is observed in one-fifth of the total districts of the state. Most of the districts of this index are distributed into two smaller belts, one in the east and the other in the southern part of the state whereas three districts Bulandshahar, Faizabad and Sonbhadra are widely spaced. The eastern belt is formed by the districts Shrawasti, Balarampur, Sidharth Nagar and Maharajgang and the southern belt is formed by Lalitpur, Jhansi, Hamirpur, Mahaba, Banda, Chitrakoot and Kaushambi districts.

High level of rural scheduled employment is found only in eleven percent districts of the state. Except Agra all the districts of this group are confined either in the southern or eastern Uttar Pradesh .One identifiable belt of this grade is consisted of the districts Bahraich, Barabanki, Rae Baraeilly and Fatehpur whereas the other districts in this group are Jalaun, Allahabad and Mirzapur.

Medium level of scheduled caste rural employment rate is found in around fifteen percent districts of the state. The recognisable region of this grade is

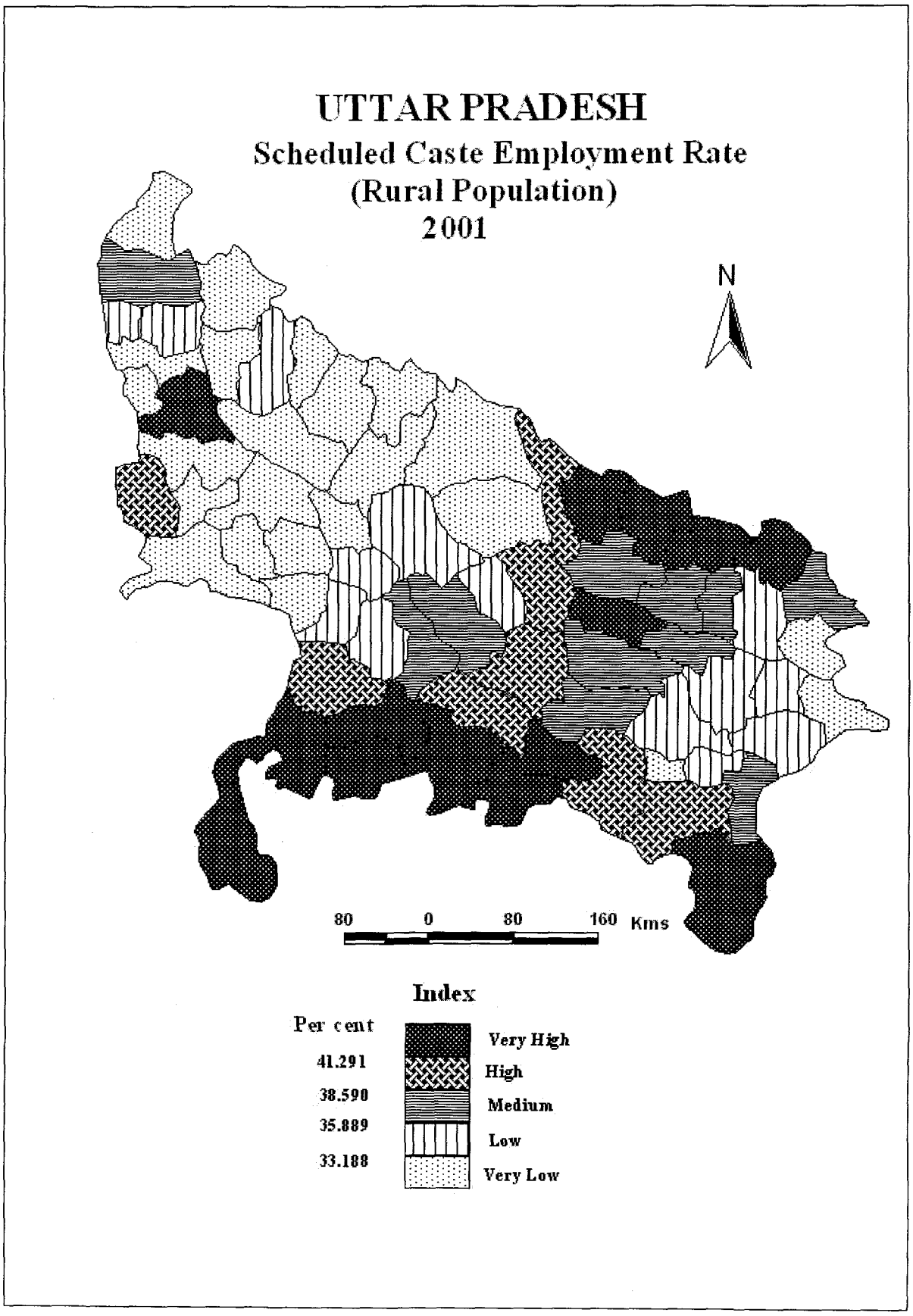
UTTAR PRADESH
Scheduled Caste Employment Rate
(Rural Population)
2001
N
80 0 80 160 Kms
Index
Per cent
41.291
38.590
35.889
33.188
Very High
High
Medium
Low
Very Low

Fig. 4.22

formed by the six eastern districts Gonda, Basti, Sant Kabir Nagar, Ambedkar Nagar Sultanpur and Pratapgarh whereas the other scattered districts in this group are Muzaffarnagar, Kushinagar, Chandauli, Unnao and Kanpur Nagar.

Low level scheduled caste rural employment rate is seen in one-fifth districts of the state. Apart from two identifiable region, one in the east and the other in central part, three districts Baghpat, Meerut and Moradabad of the slab are isolated .The districts of eastern pocket are Gorakhpur, Azamgarh, Mau, Jaunpur, Ghazipur and Varanasi. The districts of the central pocket are Lucknow, Hardoi, Kannauj Auraiya and Kanpur Dehat.

Very low level of scheduled caste rural employment is observed in thirty three percent districts of the state. Except three eastern districts Deoria, Ballia and Sant Ravidas Nagar, all of the twenty districts in this group are confined into the western part of the state. Leaving Saharanpur, all the other western districts of this grade form a big identifiable region. The districts of this big western pocket are Bijnor, Moradabad, Ghaziabad,Baghat, Badaun, Rampur, Bareilly, Pilibhit, Kheri, Sitapur, Shahjahanpur, Farrukhabad, Etah, Aligarh, Hathras, Agra, Firozabad, Mainpuri and Etawah .

Urban employment rate of scheduled caste people varies from 29.85 percent to 26.49 percent in the decade 2001. This whole range is further divisible into five groups of Very High (above 29.85 per cent), High (28.73 per cent to 29.85 per cent), Medium (27.61 per cent to 28.73 per cent), Low (26.49 per cent to 27.61per cent), Very Low (below 26.49 per cent) as mentioned in the fig 4.23.

A big pocket of very high level of scheduled caste employment rate is observed in the districts of southwestern part of the state and comprises of the districts Lalitpur, Jhansi, Hamirpur, Mahoba and Banda districts. Rest of the seven districts in this grade do not form any region of recognizable size. High urban employment rate is found in only seven widely spaced districts Muzaffar Nagar

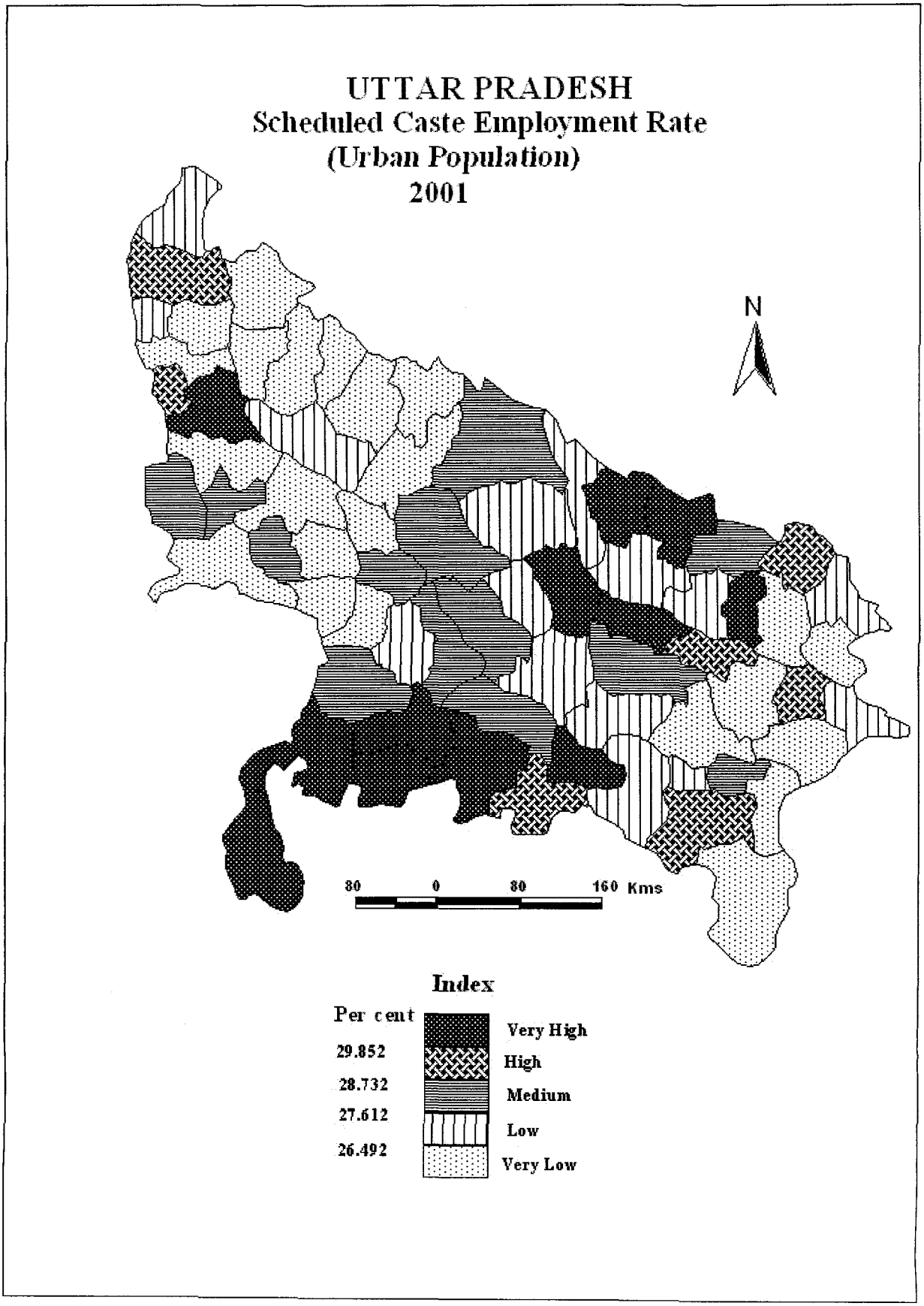
UTTAR PRADESH
Scheduled Caste Employment Rate
(Urban Population)
2001
N
80 0 80 160 Kms
Index
Per cent
29.852
28.732
27.612
26.492
Very High
High
Medium
Low
Very Low

Fig. 4.23

Gautam Budha Nagar, Chitrakoot, Sant Kabir Nagar, Sidharthnagar, Mau and Ghazipur districts.

Medium level of urban scheduled caste employment rate is mostly confined in the central part of the state. A single recognizable region of this grade which runs form north to south and formed by the districts Kheri, Hardoi, Auraiya, Kanpur Nagar, Unnao and Fatehpur districts. Rest of the seven districts of the same grade do not form any recognizable region.

Around twenty one percent districts of the study area fall under the category of low level of urban scheduled caste employment rate. Leaving the six scattered districts, all the other districts Basti, Gonda, Bahraich, Sitapur, Lucknow, Rae Bareilly, Pratapgarh, Allahabad and Sant Ravidas Nagar form a discontinuous region. Very low level of urban scheduled caste employment rate is observed in around thirty three percent districts of the state. Most of the districts of western Uttar Pradesh fall in this category. Apart from it seven eastern districts, Deoria, Gorakhpur, Azamgarh, Jaunpur, Ghazipur, Chandauli and Sonbhadra fall in this grade.

Relationship between Employment Rates (Total, Rural and Urban) and Selected Independent Indicators

In the present investigation, a relationship has been established between employment rates (total, rural and urban) and twenty eight independent indicators. This is done to obtain a rational hypothesis of relationship between the indicators and employment rates. A simple association between the employment rates and each of the independent indicators have been computed and listed with the assumption that linear relationship existed in all the cases. The results for the indicators are shown in the Table. 4.16.

Among these indicators, the coefficients of correlation of sixteen indicators recorded a highly significant relationship with the employment rate. X_2 (density of scheduled caste population), X_7 (net sown area to the total cultivated area), X_9

(irrigation intensity), X_{10} (number of working industrial units per lakh population), X_{11} (persons working in registered industries per lakh population), X_{20} (number of higher secondary schools per lakh population) and X_{24} (number of hospitals per lakh population). Among them only the last variable (X_{24}) is having inverse relationship with Y_1, whereas, the others exhibit direct relationship.

Among the indicators the coefficient of correlation of nine indicators in total scheduled caste population are found to be significant at 99 percent level of confidence. They are X_3 (ratio of scheduled caste population to total population), X_5 (per capita net sown area), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_6 (cropping intensity), X_8 (net irrigated area), X_{12} (percentage of scheduled caste urban population), X_{17} (literacy rate of scheduled caste population) and X_{27} (length of metalled road per thousand square kilometer). However, only first four are showing direct relationship and contrary to it is observed in case of rest of the indicators.

The foregoing discussion leads to conclusion that X_8 (net irrigated area), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population) and X_{17} (literacy rate of scheduled caste population) are the chief determinants, but the magnitude of their effects are dissimilar.

In case of rural scheduled caste population (table no. 4.16), the coefficients of correlation of fourteen indicators recorded a highly significant relationship with scheduled caste rural employment rate. Among them eight indicators turned out to be significant at 99 percent level of confidence, in which half of the indicators are showing positive relationship, whereas, the other half indicators are found to have negative relationship.

Table 4.16 Results of Correlation (r) between Employment Rates (Total, Rural, Urban) and Other Selected Indicators, U.P, 2001.

Indicators	Total (Y_1)	Rural (Y_2)	Urban (Y_3)
X_1	-0.168	-0.191	-0.218
X_2	-.299*	-.267*	-0.161
X_3	.312**	.300*	0.214
X_4	0.232	0.179	-0.055
X_5	.420**	.441**	.365**
X_6	-.328**	-.367**	-.344**
X_7	-.268*	-.255*	-0.198
X_8	-.665**	-.671**	-.387**
X_9	-.273*	-.274*	-.252*
X_{10}	-.259*	-.246*	0.021
X_{11}	-.246*	-0.234	-0.034
X_{12}	-.414**	-.278*	-0.139
X_{13}	-0.217	-0.214	0.019
X_{14}	-	.986**	.703**
X_{15}	.986**	-	.695**
X_{16}	.703**	.695**	-
X_{17}	-.537**	-.454**	-.316**
X_{18}	0.017	0.025	-0.037
X_{19}	-0.093	-0.048	-0.119
X_{20}	-.240*	-0.204	-0.086
X_{21}	0.079	0.041	0.04
X_{22}	0.06	0.037	-0.034
X_{23}	0.013	-0.011	-0.09
X_{24}	.293*	.312**	0.071
X_{25}	-0.129	-0.02	-0.143
X_{26}	0.168	0.17	0.111
X_{27}	-.424**	-.378**	-.271*
X_{28}	-0.119	-0.056	-0.045

****Significance at 1 Per cent Level**
*** Significance at 5 Per cent Level**

They are X_5 (per capita net sown area), X_{14} (total employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{29} (number of hospitals per lakh population).The negatively correlated indicators are X_6 (cropping intensity), X_8 (net irrigated area), X_{17} (literary rate of scheduled caste population) and X_{27} (length of the metalled road per thousand square kilometers). Six indicators X_3 (ratio of scheduled caste population to the total population), X_2 (density of scheduled caste population), X_7 (net sown area

to the total cultivated area), X_9 (irrigation intensity), X_{10} (number of working industrial units) and X_{12} (percentage of scheduled caste urban population) ascertain 95 percent level of confidence. Leaving the variable X_3 all of them (X_2, X_7, X_9, X_{10} and X_{12}) are having indirect relationship. It may be concluded that the regional variation in employment rate of rural scheduled caste population is mainly caused by X_8 (net irrigated area), X_{12} (total scheduled caste employment rate), X_{14} (total scheduled caste employment rate) and X_{16} (urban scheduled caste employment rate).

For the urban scheduled caste population only eight indicators as given in the table 4.16 are found to have significant relationship. Among them X_9 (irrigation intensity) and X_{27} (length of metalled road per thousand square kilometers) are significant at 99 percent level of confidence and they record reciprocal relationship. Rests of the six indicators are significant at 95 percent level of confidence. Among these six indicators three indicators X_5 (per capita net sown area), X_{14} (total employment rate of scheduled caste population) and X_{15} (rural employment rate of schedule caste population) are positively correlated whereas X_6 (cropping intensity) X_8 (net irrigated area) and X_{17} (literacy rate scheduled caste population) are negatively correlated.

This analysis leads to the broad conclusion that X_8 (net irrigated area), X_{14} (scheduled caste total employment rate, X_{15} (scheduled caste rural employment rate) have substantial impact on the distribution of employment rate of urban scheduled caste population of Uttar Pradesh.

Scheduled Caste Male Employment, 2001

General Distribution

Total male employment rate of scheduled caste has declined from 50.8 percent in 1991 to 46.9 percent in 2001. The five grades of general employment rate of scheduled caste male population are Very High, High, Medium, Low and Very Low as shown in the fig. no. 4.24. The scheduled caste employment rate of very

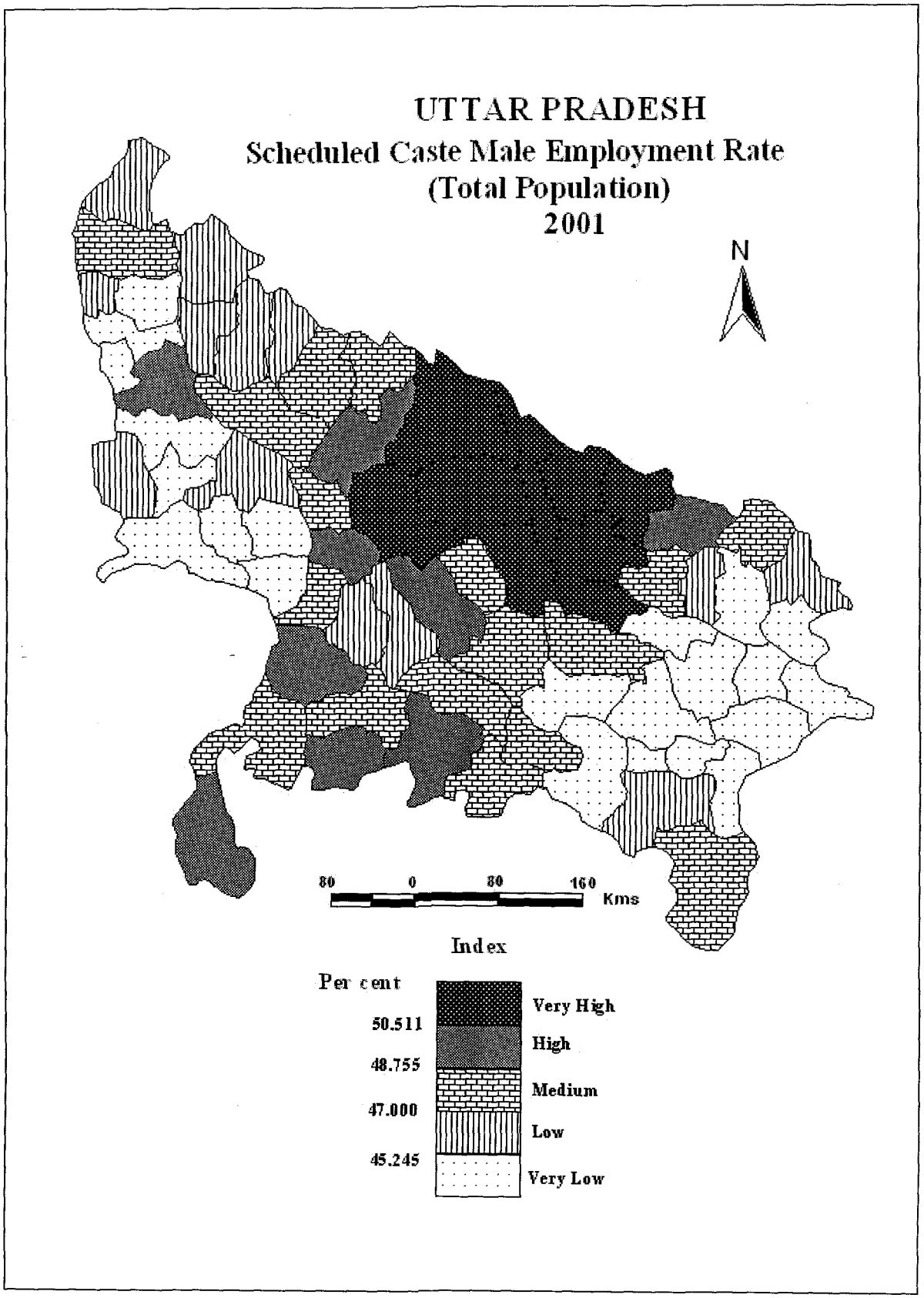
UTTAR PRADESH
Scheduled Caste Male Employment Rate
(Total Population)
2001
N
80
0
80
160
Kms
Index
Per cent
50.511
48.755
47.000
45.245
Very High
High
Medium
Low
Very Low

Fig. 4.24

Table 4.17 District wise Employment Rate of Scheduled Caste Male Workers, Uttar Pradesh, 2001

District	Total	Rural	Urban
Saharanpur	46.3	46.5	44.1
Muzaffarnagar	48.2	48.9	44.8
Bijnor	45.9	46.1	42.9
Moradabad	46.9	47.8	43.0
Rampur	45.6	46.0	41.8
Jyotiba Phule Nagar	45.9	46.2	43.6
Meerut	44.8	46.4	42.6
Baghpat	45.4	45.9	42.8
Ghaziabad	44.0	45.2	43.0
Gautam Buddha Nagar	43.2	42.4	45.7
Bulandshahar	50.2	51.1	44.9
Aligarh	44.8	45.4	42.8
Hathras	45.2	45.3	44.6
Mathura	46.5	47.2	43.5
Agra	43.3	44.5	41.8
Firozabad	43.7	44.1	42.5
Etah	45.5	46.2	41.4
Mainpuri	44.9	45.7	38.7
Budaun	47.7	48.1	44.4
Bareilly	47.4	48.6	42.4
Pilibhit	47.8	48.3	42.1
Shahjahanpur	49.3	50.0	42.7
Kheri	51.7	51.9	47.1
Sitapur	51.4	51.7	45.1
Hardoi	51.2	51.5	44.9
Unnao	49.9	50.3	44.8
Lucknow	47.5	49.0	44.3
Rae Bareli	48.6	48.9	43.1
Farrukhabad	47.3	48.1	43.7
Kannauj	48.8	49.3	44.3
Etawah	44.9	45.7	40.7
Auraiya	47.5	48.1	41.6
Kanpur Dehat	46.9	47.1	42.4
Kanpur Nagar	46.5	48.1	44.7
Jalaun	48.8	49.8	44.6
Jhansi	47.9	50.5	42.7
Lalitpur	49.6	50.2	42.6
Hamirpur	48.7	49.5	44.5
Mahoba	49.7	50.5	46.0

Table 4.17 (Continued)

Banda	49.1	49.9	43.8
Chitrakoot	48.0	48.4	43.5
Fatehpur	48.2	48.5	43.5
Pratapgarh	43.0	43.0	41.2
Kaushambi	47.6	47.7	45.6
Allahabad	45.2	45.9	41.2
Barabanki	53.5	53.7	46.3
Faizabad	52.6	52.9	46.8
Ambedkar Nagar	44.9	44.8	45.2
Sultanpur	47.2	47.3	42.3
Bahraich	53.9	54.3	43.7
Shravasti	56.6	56.7	50.0
Balrampur	55.9	56.1	48.9
Gonda	52.5	52.8	42.7
Siddharthnagar	49.6	49.7	45.6
Basti	48.1	48.3	42.7
Sant Kabir Nagar	46.0	46.0	45.2
Maharajganj	48.3	48.4	44.4
Gorakhpur	42.8	43.2	40.3
Kushinagar	46.3	46.4	43.8
Deoria	40.7	40.9	37.8
Azamgarh	40.6	40.6	40.0
Mau	41.0	41.0	40.9
Ballia	40.2	40.3	39.7
Jaunpur	41.0	41.0	40.8
Ghazipur	41.1	41.2	39.7
Chandauli	44.5	45.0	38.9
Varanasi	43.6	43.8	42.9
Sant Ravidas Nagar	42.5	42.5	42.9
Mirzapur	46.6	46.7	44.7
Sonbhadra	48.5	49.0	41.4
Uttar Pradesh	**46.9**	**47.4**	**43.10**

Source: *Census of India, 2001*

high grade (above 50.511 per cent) is observed in around twelve percent districts of the state. The districts of very high total scheduled caste employment rate are found in the form of single compact pocket of nine eastern districts Kheri, Hardoi, Sitapur, Barabanki, Bahraich, Shrawasti, Balrampur, Gonda and Faizabad. The high level (48.996 per cent to 51.092 per cent) of total male employment rate of scheduled caste population is observed in around twelve

percent districts of the state which don't form any identifiable region .The districts of this grade are widely spaced and they are Buland Shahar, Shahjahanpur, Auraiya, Unnao, Siddharthnagar, Jalaun, Mahoba, Banda and Jhansi. Medium level (47 percent to 48.75 percent) of male employment rate is found in around one-fourth districts of the state. A smaller belt of four western districts (Pilibhit, Bareilly, Badaun and Farrukhabad) and a belt of central and southern districts (Jhansi, Hamirpur, Fatehpur, Banda, Kaushambi Rae Bareilly, Sultanpur and Lucknow) account for the distribution of majority the districts of this category.

Low level of total male employment rate of scheduled caste people is found in around sixteen percent districts of the state. Except a pocket of four western districts (Bijnor, Jyotiba Phule Nagar, Moradabad and Rampur) all the other districts in this group are widely spaced. One lies in eastern part and comprises of the districts Gorakhpur, Mau, Azamgarh, Jaunpur, Varanasi and Ghazipur ,the other central pocket of the same group includes the districts Lucknow, Hardoi, Kannauj, Auraiya and Kanpur Dehat. Very low male employment rate is found around thirty seven percent districts of the state .A very large pocket of this category is found in eastern Uttar Pradesh including the districts Deoria, Gorakhpur, Sant Kabir Nagar, Azamgarh, Mau, Ballia, Ghazipur, Chandauli, Varanasi, Sant Ravidas Nagar, Allahabad, Pratapgarh and Jaunpur districts. Apart from it the other discontinuous zone is formed by the western districts Etawah, Mainpuri, Firozabad, Agra, Hathras, Aligarh, Gautam Budha Nagar, Ghaziabad and Meerut districts.

Rural and Urban Distribution 2001

The rural male employment rate of scheduled caste population has declined from 51.43 percent in 1991 to 47.4 percent in the year 2001.This distributional pattern of rural male scheduled caste employment rate which is quite similar to the regional pattern of total male scheduled caste employment rate is explained by

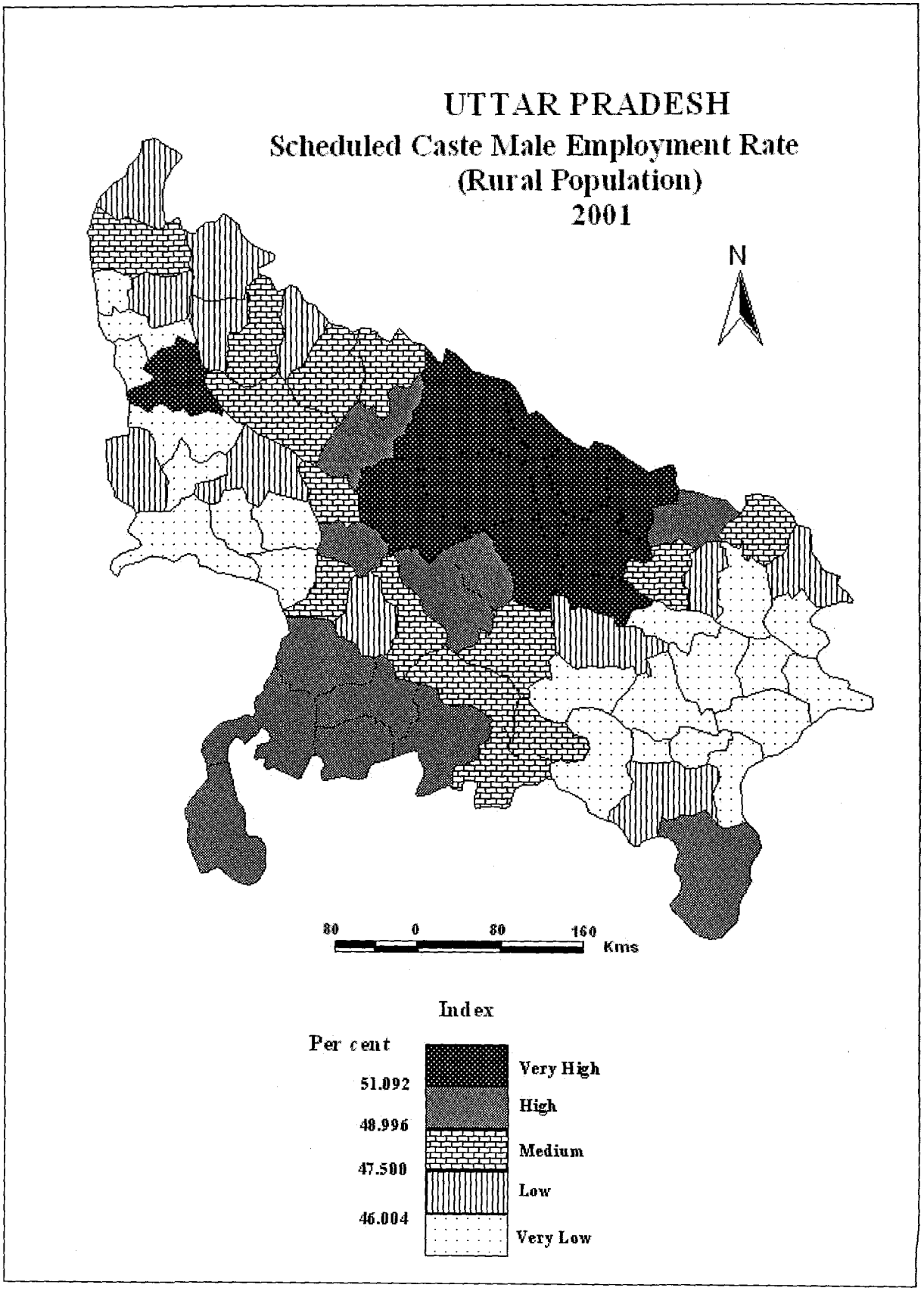
UTTAR PRADESH
Scheduled Caste Male Employment Rate
(Rural Population)
2001
N
80 0 80 160
Kms
Index
Per cent
51.092
48.996
47.500
46.004
Very High
High
Medium
Low
Very Low

Fig. 4.25

dividing the whole range of employment into five different grades: Very High (above 51.09 per cent), High (48.99 per cent to 51.09 per cent), Medium (47.50 per cent to 48.98 per cent), Low (46.00 per cent to 47.49 per cent), Very Low (below 46 per cent). In the group of very high rate of rural male scheduled caste employment (clear from the fig 4.26) is observed in one-tenth of the total districts of the state. Leaving the district Bulandshahar in the west all the other districts of this index are distributed into one compact pocket of eastern districts Kheri, Hardoi, Sitapur, Barabanki, Bahraich, Shrawasti, Balarampur, Gonda and Faizabad. High level of rural male scheduled caste employment is found only in eleven districts of the state. Among them five districts Lalitpur, Jhansi, Jalaun, Hamirpur, Mahoba and Banda in the south western part form an identifiable region of this grade. Medium level of scheduled caste rural male employment rate is found in twenty percent districts of the state and one observable region of this grade is formed by the five western districts, namely Pilibhit, Bareilly, Moradabad, Badaun and Farrukhabad, whereas, the other pocket is formed by the districts Kanpur Nagar, Fatehpur,Rae Bareilly, Kaushambi and Chitrakoot.

Low level scheduled caste rural male employment rate is seen in around seventeen percent districts which don't form any identifiable region and majority of them are distributed in the western part of the state. Very low level of scheduled caste rural male employment rate is observed in around thirty one percent districts of the state. A big identifiable region of this group is formed by the thirteen eastern districts and the other big discontinuous region of nine districts in the western part of the state.

Urban employment rate of urban male scheduled caste people varies from 46.18 percent in 1991 to 43.10 percent in the decade 2001. This whole range is further divisible into five groups of Very High (above 45.51 per cent), High (44.40 per cent to 45.51 per cent), Medium (43.30 per cent to 44.39 per cent), Low (42.19

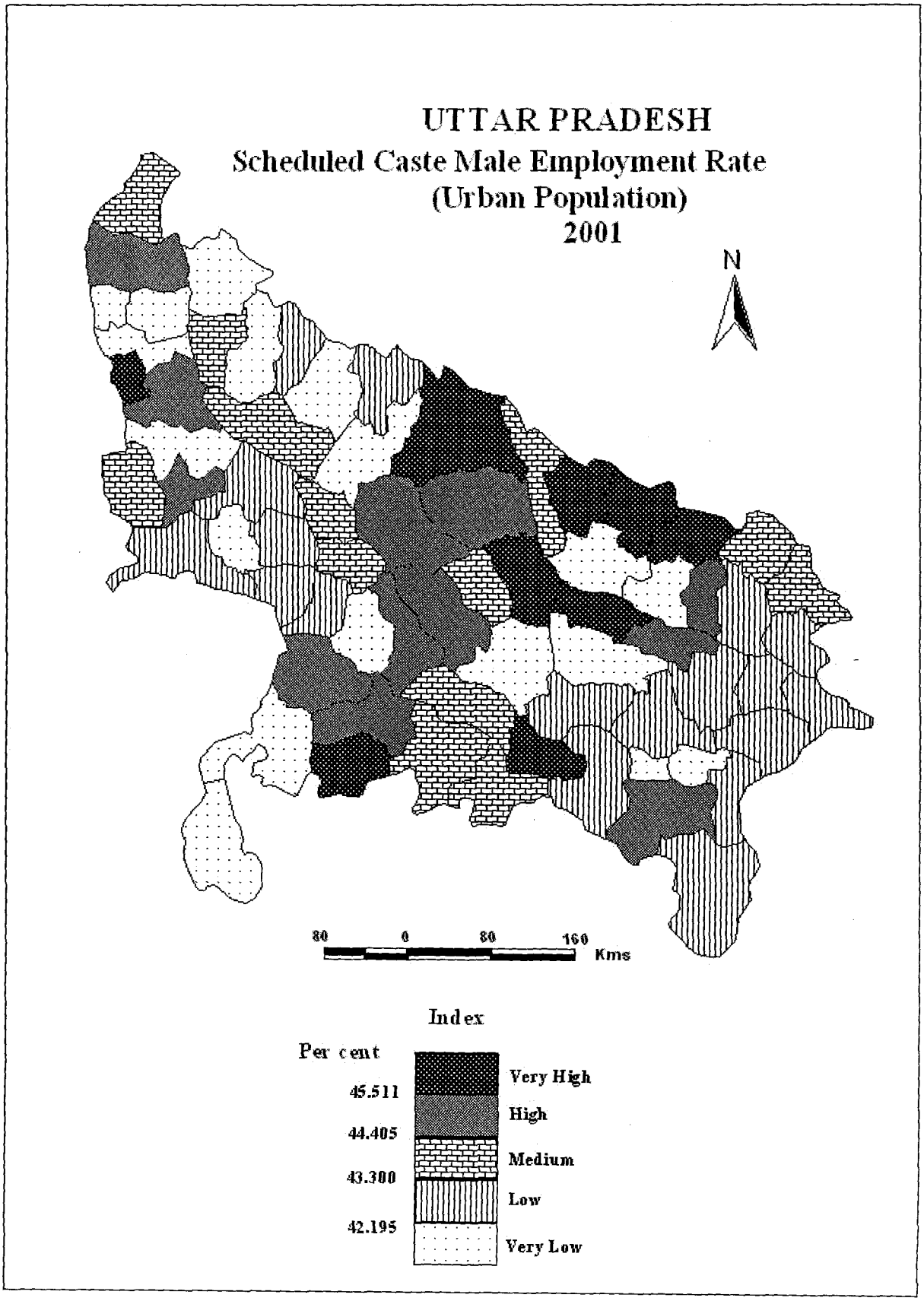
UTTAR PRADESH
Scheduled Caste Male Employment Rate
(Urban Population)
2001
N
80
0
80
160
Kms
Index
Per cent
45.511
44.405
43.300
42.195
Very High
High
Medium
Low
Very Low

Fig. 4.26

per cent to 43.29 per cent), Very Low (below 42.19 per cent) as shown in the fig 4.27. A big pocket of very high level of scheduled caste urban male employment rate is observed in around thirteen percent districts of the state which don't form any big identifiable region. A small region of this group is formed by three eastern districts namely, Shrawasti, Balrampur and Sidharth Nagar. High urban male employment rate is found in around seventeen percent districts of the state. These districts are scattered over the state with one identifiable belt of six districts Sitapur, Hardoi, Unnao, Kanpur Nagar, Hamirpur and Jalaun districts. Medium level of urban male scheduled caste employment rate of this census year is also not showing any definite pattern. A small region of this grade is formed by three southern districts (Fatehpur, Banda and Chitrakoot) the other belt is formed by the western districts (Jyotiba Phule Nagar, Badaun, Farrukhabad and Kannauj). Rest of five districts of the same grade do not form any recognizable region.

Around twenty four percent districts of the study area fall in the category of low level of urban scheduled caste male employment rate. Leaving the two scattered districts (Rampur and Pilibhit), all the other districts are distributed in the form of two identifiable regions. One big region is formed by the eleven eastern and south eastern districts. The other region is formed by the western districts Agra, Etawah, Auraiya, Mainpuri and Etah. Very low level of urban scheduled caste employment rate is observed in around twenty five percent districts of the state. These districts are mostly confined to the western part of the state with few districts in the eastern and southern part of the state.

Relationship between Male Employment Rates (Total, Rural and Urban) and Selected Indicators

In the present investigation, relationship has been tested between male employment rates (total, rural and urban) and twenty eight independent indicators. A simple association between the employment rates and each of the independent indicators have been computed and listed. The results for the

indicators are shown in the table. no. 4.18. Among these indicators, the coefficients of correlation of fourteen indicators recorded a highly significant relationship with the employment rate.

Table 4.18 Results of Correlation (r) between Male Employment Rates (Total, Rural, Urban) and Other Selected Indicators, U.P, 2001.

Indicators	Total Male(Y_1)	Rural Male (Y_2)	Urban Male (Y_3)
X_1	-.370**	-.393**	-.297*
X_2	-.451**	-.441**	-0.168
X_3	0.108	0.099	0.037
X_4	-.391**	-.443**	-.307**
X_5	.379**	.395**	0.215
X_6	-0.16	-0.173	-.249*
X_7	-0.051	-0.042	0.033
X_8	-.487**	-.485**	-.317**
X_9	-0.06	-0.054	-0.1
X_{10}	-0.178	-0.195	0.123
X_{11}	-0.153	-0.172	0.105
X_{12}	-.251*	-0.149	-0.056
X_{13}	-0.12	-0.144	0.137
X_{14}	.574**	.547**	.465**
X_{15}	.556**	.550**	.453**
X_{16}	.507**	.481**	.724**
X_{17}	-.561**	-.498**	-.372**
X_{18}	0.138	0.165	-0.109
X_{19}	-0.092	-0.041	-0.217
X_{20}	-.419**	-.387**	-.276*
X_{21}	-0.198	-.240*	-0.092
X_{22}	-0.225	-.250*	-0.185
X_{23}	0.209	0.19	0.039
X_{24}	-0.026	-0.007	-.246*
X_{25}	-0.113	-0.031	-0.143
X_{26}	-0.088	-0.082	-.241*
X_{27}	-.405**	-.379**	-.237*
X_{28}	0.003	0.063	-0.142
X_{29}	-	.991**	.737**
X_{30}	.991**	-	.707**
X_{31}	.737**	.707**	-

****Significance at 1 Per cent Level**
*** Significance at 5 Per cent Level**

Only one among them i.e., X_{14} (scheduled caste total employment rate) yielded highly significant relationship at 95 percent level of confidence with dependent variable Y_1 (total scheduled caste male employment rate. However, X_5 (per capita net sown area), X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{30} (rural male employment rate of scheduled caste population), X_{31}(rural male employment rate of scheduled caste population), X_1 (growth rate of scheduled caste population), X_2 (density of scheduled caste population), X_4 (sex ratio of scheduled caste population), X_{12} (per cent of scheduled caste urban population), X_{17} (literacy rate of scheduled caste population), X_{20} (number of higher secondary schools per lakh population), X_{27} (length of metalled road per thousand square kilometer), The first six indicators as mentioned bear a positive relationship, whereas, the last seven explain a negative relationship with total male employment rate of scheduled caste population.

It is concluded from the above discussion that X_{14} (total employment rate of scheduled caste population), X_{17} (literacy rate of scheduled caste population), X_{30} (rural male employment rate of scheduled caste population), X_{31} (urban male employment rate scheduled caste population) are the chief determinants but the magnitude of their effects are dissimilar.

Rural and Urban Distribution

The results of simple linear relationship of employment groups of rural population are almost similar to the results of employment groups of total population. It has been found that almost all the indicators are similar in the direction of relationship though in degrees they differ considerably.

It may be concluded that the regional variation in employment rate of rural male scheduled caste population is mainly due to X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{29} (total male employment rate of scheduled caste population) and

X_{31}(rural male employment rate of scheduled caste population) are the chief determinants but the magnitude of their effects are dissimilar.

The results of simple linear relationship of employment groups of urban male scheduled caste population is not very different from the results of the simple association of selected independent indicators with employment rates of total male population and rural male population as inferred from the table no. 4.18. Again fourteen indicators are found to have significant coefficient of correlation. The indicators satisfying 95 percent of level of confidence are X_1 (growth rate of scheduled caste population) and X_6 (cropping intensity), X_{20} (number of higher secondary schools per lakh population), X_{24} (number of hospitals per lakh population), X_{26} (number of primary health care centers per lakh population), and X_{27} (length of metalled road per thousand square kilometer). All of them bear a positive relationship.

Besides these, eight indicators are found to have significant relationship at 99 percent level of confidence. Among these eight, the three indicators namely X_4 (sex ratio of scheduled caste population), X_8 (net irrigated area) and X_{17} (literacy rate of schedule caste population) are negatively correlated, whereas, X_{14} (total employment rate of scheduled caste population) X_{15} (rural employment rate of scheduled caste population) X_{16} (urban employment rate of scheduled caste population), X_{29} (scheduled caste total male employment rate) and X_{30}(scheduled caste rural male employment rate) are positively correlated.

This analysis leads to the broad conclusion that the indicators, X_{16} (urban employment rate of scheduled caste population), X_{29} (scheduled caste total male employment rate), X_{30} (scheduled caste rural male employment rate) have substantial impact on the distribution of employment rate of urban male scheduled caste population of Uttar Pradesh.

Scheduled Caste Female Employment, 2001

General Distribution

Total female employment rate of scheduled caste has increased from 17.61 percent in 1991 to 21.2 percent in 2001. In the year 2001, the general employment rate of scheduled caste female population has been divided into five grades. These five grades along with their values are Very high (above 31.23 per cent), High (26.31per cent to 31.23 per cent), Medium (21.40 per cent to 26.31 per cent), Low (16.49 per cent to 21.39 per cent) and Very Low (below 16.49). The scheduled caste total female employment rate of very high grade is observed in (as shown in the fig 4.28) around sixteen percent districts of the state. The districts of very high female scheduled caste employment rate are found in the form of two smaller regions of three eastern (Balrampur, Siddharth Nagar and Maharajgang) and four southern districts (Mahoba, Banda, Chitrakoot and Kaushambi) with three widely spaced districts. The high rate of total female employment rate of scheduled caste population is observed in around twenty five percent districts of the state most of which form single identifiable belt running from eastern to south eastern and south western part of the state. The other districts of this grade are widely spaced and they are Bulandshahar, Shahjahanpur, Auraiya, Unnao, Siddharthnagar, Jalaun, Mahoba, Banda and Jhansi. Medium level of female employment rate is found in six districts (Mathura, Jalaun, Varanasi, Mau, Gorakhpur and Deoria) of the state. Low level of total female employment rate of scheduled caste people is found in around twelve percent districts of the state. All of them are ubiquitously distributed overthe whole state. Very low female employment rate is found around in thirty seven percent districts of the state .A very large pocket of this category covers majority of the districts of western Uttar Pradesh with few districts of central Uttar Pradesh. No district of this grade is observed in the eastern part of the state

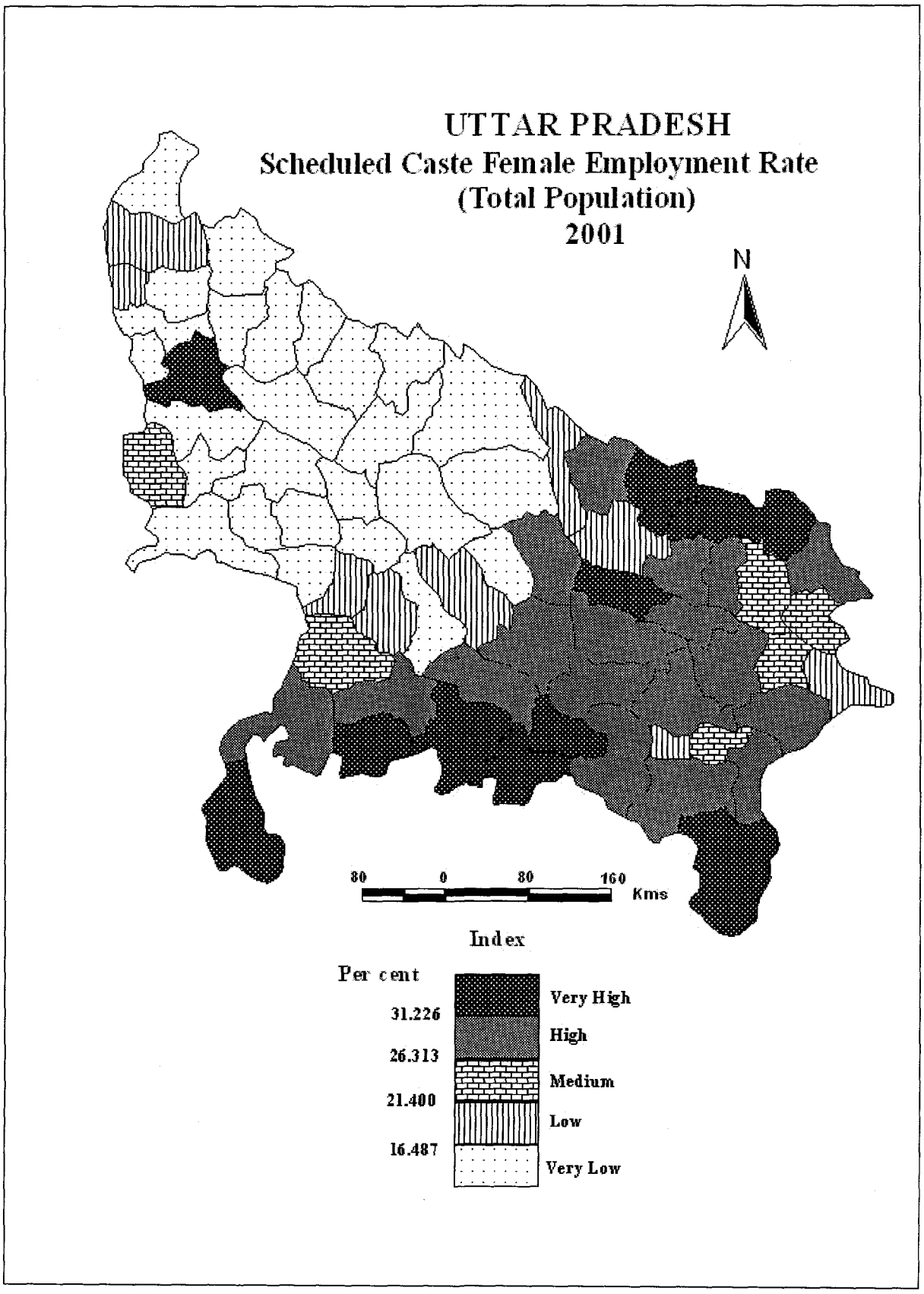
UTTAR PRADESH
Scheduled Caste Female Employment Rate
(Total Population)
2001
N
80 0 80 160
Kms
Index
Per cent
31.226
26.313
21.400
16.487
Very High
High
Medium
Low
Very Low

Fig. 4.27

Table 4.19 District wise Employment Rate of Scheduled Caste Female Workers, Uttar Pradesh , 2001

District	Total	Rural	Urban
Saharanpur	9.6	9.9	7.4
Muzaffarnagar	20.1	21.6	11.7
Bijnor	9.7	10.1	5.2
Moradabad	14.5	16.5	5.5
Rampur	8.1	8.1	7.7
Jyotiba Phule Nagar	14.2	15.5	5.5
Meerut	13.9	19.3	6.1
Baghpat	17.8	19.3	9.8
Ghaziabad	10.6	15.3	6.2
Gautam Buddha Nagar	11.6	12.6	8.6
Bulandshahar	32.0	35.0	13.6
Aligarh	14.7	16.8	7.5
Hathras	10.9	11.2	8.9
Mathura	25.3	29.1	9.6
Agra	8.0	9.4	6.2
Firozabad	8.6	7.5	11.7
Etah	8.0	8.1	7.0
Mainpuri	6.6	6.9	4.7
Budaun	8.9	9.2	6.8
Bareilly	10.8	11.7	7.3
Pilibhit	6.1	6.2	5.9
Shahjahanpur	5.9	5.9	6.1
Kheri	10.3	10.5	5.8
Sitapur	10.3	10.4	6.9
Hardoi	12.8	13.1	7.5
Unnao	21.4	22.3	9.1
Lucknow	15.6	18.8	8.6
Rae Bareli	29.3	30.2	9.9
Farrukhabad	7.2	7.4	6.2
Kannauj	14.5	15.0	10.7
Etawah	7.2	7.4	5.6
Auraiya	17.9	18.9	7.2
Kanpur Dehat	18.3	18.8	8.8
Kanpur Nagar	15.6	21.8	8.3
Jalaun	23.7	27.2	8.7
Jhansi	27.8	33.8	15.4
Lalitpur	40.7	42.6	19.3
Hamirpur	30.7	33.7	14.8
Mahoba	36.6	40.9	15.3

Table 4.19 (Continued)

Banda	36.2	39.4	13.7
Chitrakoot	40.1	42.1	14.2
Fatehpur	30.2	31.5	10.4
Pratapgarh	30.9	31.5	11.3
Kaushambi	35.2	35.7	23.6
Allahabad	29.5	32.5	10.7
Barabanki	26.8	27.1	16.2
Faizabad	35.0	36.3	12.3
Ambedkar Nagar	27.8	28.3	11.6
Sultanpur	27.0	27.3	11.8
Bahraich	19.9	20.3	8.1
Shravasti	31.0	31.1	12.1
Balrampur	37.6	38.7	10.3
Gonda	20.1	20.5	8.6
Siddharthnagar	33.1	33.6	9.4
Basti	27.4	28.1	10.1
Sant Kabir Nagar	30.1	30.7	13.1
Maharajganj	33.9	34.7	13.1
Gorakhpur	22.9	24.9	6.4
Kushinagar	27.5	28.0	9.1
Deoria	22.4	23.2	9.6
Azamgarh	26.4	27.0	9.8
Mau	26.0	26.7	16.6
Ballia	21.2	21.8	12.2
Jaunpur	27.0	27.6	8.5
Ghazipur	26.6	27.3	9.0
Chandauli	26.4	27.8	8.7
Varanasi	21.4	24.6	10.5
Sant Ravidas Nagar	19.4	20.1	8.5
Mirzapur	29.3	30.5	12.0
Sonbhadra	32.4	34.0	5.9
Uttar Pradesh	**21.2**	**22.9**	**8.8**

Source: Census of India, 2001

Rural and Urban Distribution 2001

The rural employment rate of scheduled caste female population has swelled up from 13.43 percent in 1991 to 22.9 percent in the year 2001.This distribution pattern of rural male scheduled caste employment rate which is quite similar to the regional pattern of total male scheduled caste employment rate (shown in the table no. 4.19 is explained by dividing the whole range of employment into five

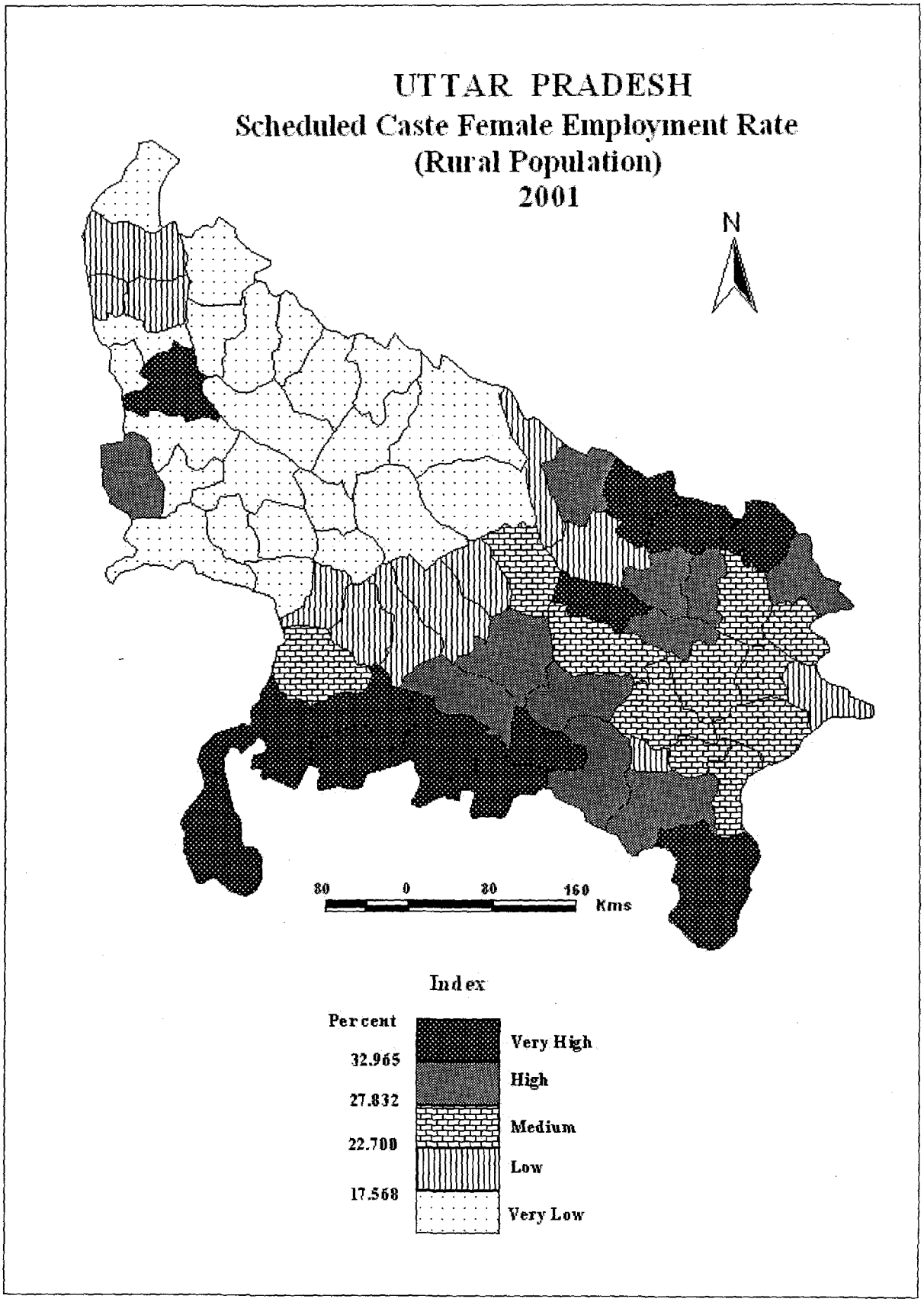
UTTAR PRADESH
Scheduled Caste Female Employment Rate
(Rural Population)
2001
N
80
0
80
160
Kms
Index
Percent
32.965
27.832
22.700
17.568
Very High
High
Medium
Low
Very Low

Fig. 4.28

different grades .Very High (above 51.09 per cent), High (48.99 per cent to 51.09 per cent), Medium (47.50 per cent to 48.98 per cent), Low (46.00 per cent to 47.49 per cent) and Very Low (below 46 per cent). The group of very high rate of rural female scheduled caste employment is observed in around eighteen percent districts of the state. Leaving the district Bulandshahar in the west all the other districts of this index are distributed either in the south western or eastern part of the state. In the south western part a belt of seven districts (Lalitpur, Jhansi, Hamirpur, Mahoba, Banda, Chitrakoot and Kaushambi) of this grade is found. Apart from it a goup of three eastern districts Balrampur, Sidharth Nagar and Maharajgang of this category is also found. High level of rural female scheduled employment is found only in eleven districts of the state. Among them, five districts (Fatehpur, Rae Bareilly, Pratapgarh, Allahabad and Mirzapur) form an identifiable region of this grade. A small pocket of this grade is formed by the eastern districts namely, Basti, Sant Kabir Nagar and Ambedkar Nagar, whereas, three districts are widely spaced.

Medium level of scheduled caste rural employment rate is found in fifteen percent districts of the state. One observable region of this grade is formed by ten districts; Barabanki, Sultanpur, Jaunpur, Varanasi, Chandauli, Ghazipur, Mau, Azamgarh, Gorakhpur and Deoria. Low level scheduled caste rural female employment rate is seen in around seventeen percent districts of the state. An identifiable region of this grade is formed by Auraiya, Kanpur Dehat, Kanpur Nagar, Unnao and Lucknow district. A tiny region of three districts (Muzaffar Nagar, Baghpat and Meerut) of this grade is found in the western part of the state. Very low female scheduled caste employment rate is observed in most of the districts of western Uttar Pradesh and this big continuous region extends towards the central part of the state.

Urban employment rate of scheduled caste females increases from 7.49 percent in 1991 to 8.80 percent in the decade 2001. This whole range is further divisible into five groups of Very High (above 13.35 per cent), High (11.57 per cent to

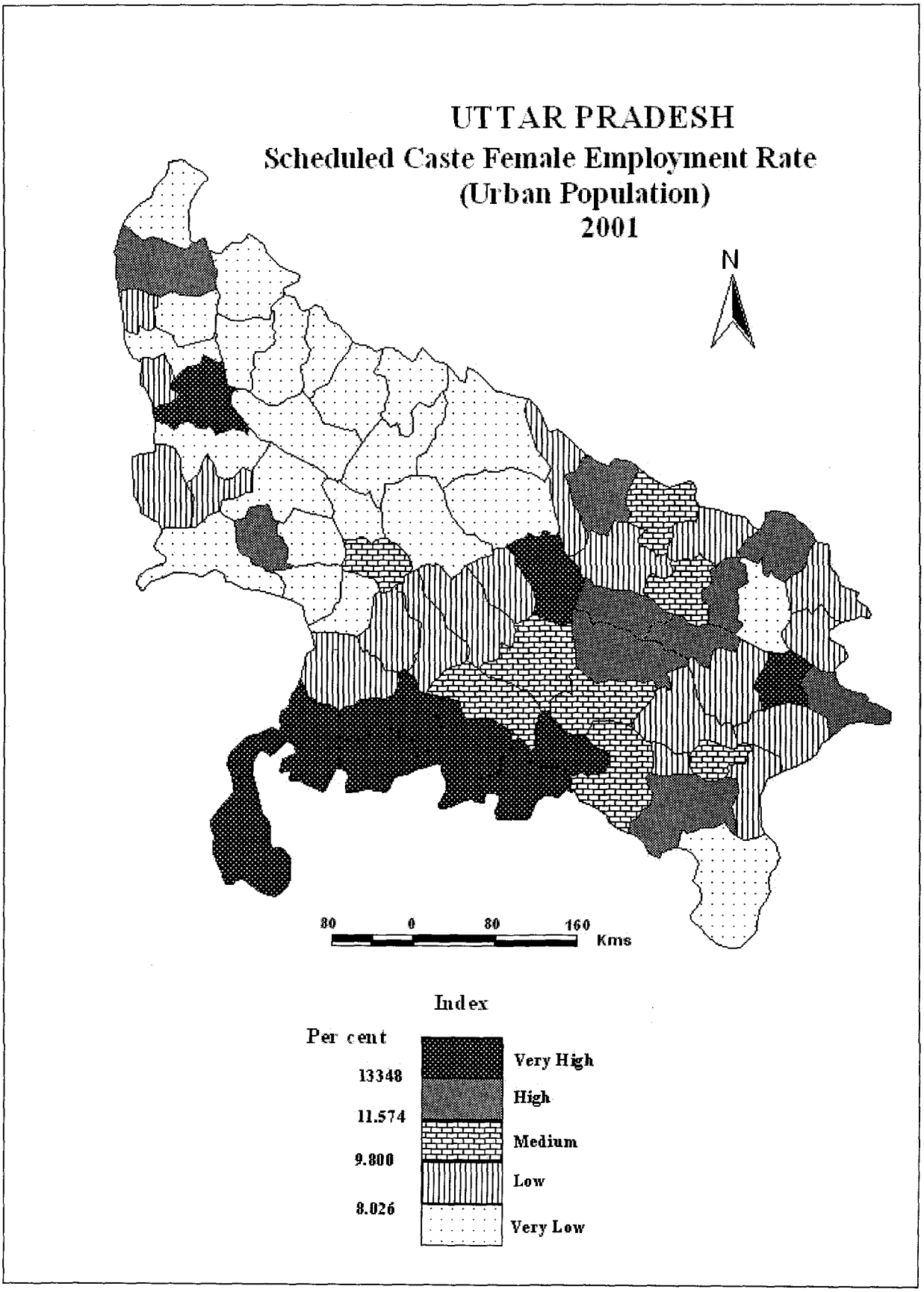
UTTAR PRADESH
Scheduled Caste Female Employment Rate
(Urban Population)
2001
N
80
0
80
160
Kms
Index
Per cent
13348
11.574
9.800
8.026
Very High
High
Medium
Low
Very Low

Fig. 4.29

13.35 per cent), Medium (9.80 per cent to 11.56 per cent), Low (8.04 per cent to 9.79 per cent) and Very Low (below 8.03 per cent) as depicted in the fig 4.27.

A big pocket of very high level of scheduled caste urban female employment rate is observed in the one-tenth districts of the state; seven among them (Lalitpur, Jhansi, Hamirpur, Mahoba, Banda, Chitrakoot and Kaushambi) form an identifiable region with three widely spaced districts. High urban female employment rate is also found in one-tenth districts of the state. Five districts (Sultanpur, Faizabad, Ambedkar Nagar,Sant Kabir Nagar and Maharajgang) form an identifiable pocket,whereas, the other five fail to form any pocket. Medium level of urban female scheduled caste employment rate is observed in eight districts of the state. Four districts (Fatehpur, Rae Bareilly, Pratapgarh and Allahabad) among them form a recognizable region. No district of this grade is found in the western part of the state. Around twenty seven percent districts of the study area fall under the category of low level of urban scheduled caste employment. An identifiable region of this grade is formed by Jalaun, Kanpur Dehat, Kanpur Nagar, Unnao and Lucknow district. Another region of this grade is found in the south eastern part and its constituent districts are Sant Ravidas Nagar, Jaunpur, Azamgarh, Ghazipur and Chandauli. Rests of the districts of this grade are scattered over the state. Very low female scheduled caste employment rate is observed in around one-third districts of the state, most of which are found in the western Uttar Pradesh in the form of big continuous region extending towards the central part of the state.

Relationship between Scheduled Caste Female Employment Rates (Total, Rural, Urban) and Selected Indicators

The testing of simple association between female employment rates (total, rural and urban) and each of the twenty eight independent indicators is shown in the table.4.19. Among all the independent indicators, the coefficients of correlation of seventeen indicators recorded a highly significant relationship with the total female employment rate. Five among them are significant at 95 percent level of confidence and they are X_5 (per capita net sown area), X_6 (cropping intensity),

X_7 (net cropped area to the total cultivated area) X_9 (irrigation intensity) and X_{10} (number of working industrial units). Only X_5 yielded a positive relationship whereas the other four bears negative relationship. Besides these, the other twelve indicators of total scheduled caste female population are showing 99 percent level of confidence; eight among are positively correlated.

Table 4.20 Results of Correlation (r) between Female Employment Rates (Total, Rural, Urban) and Other Selected Indicators, U.P, 2001.

Indicators	Total Female (Y_1)	Rural Female (Y_2)	Urban Female (Y_3)
X_1	-0.013	-0.031	-0.051
X_2	-0.137	-0.105	-0.078
X_3	.322**	.310**	.264*
X_4	.486**	.440**	.249*
X_5	.304*	.321**	.314**
X_6	-.301*	-.340**	-.266*
X_7	-.301*	-.286*	-.297*
X_8	-.560**	-.566**	-.293*
X_9	-.291*	-.290*	-.277*
X_{10}	-.236*	-0.209	-0.12
X_{11}	-0.228	-0.202	-0.184
X_{12}	-.395**	-.280*	-0.213
X_{13}	-0.213	-0.193	-0.136
X_{14}	.927**	.915**	.669**
X_{15}	.915**	.927**	.659**
X_{16}	.598**	.593**	.847**
X_{17}	-.401**	-.331**	-0.203
X_{18}	-0.061	-0.063	0.001
X_{19}	-0.09	-0.059	-0.029
X_{20}	-0.109	-0.082	0.067
X_{21}	0.202	0.173	0.158
X_{22}	0.187	0.168	0.129
X_{23}	-0.077	-0.093	-0.187
X_{24}	.356**	.365**	.297*
X_{25}	-0.102	-0.012	-0.112
X_{26}	0.233	0.233	.324**
X_{27}	-.324**	-.281*	-0.223
X_{28}	-0.151	-0.103	0.011
X_{29}	-	.990**	.721**
X_{30}	.990**	-	.709**
X_{31}	.721**	.709**	-

****Significance at 1 Per cent Level**
*** Significance at 5 Per cent Level**

They are X_3 (percent of scheduled caste population to the total population), X_4 (sex ratio of scheduled caste population), x_{14} (total employment rate of scheduled caste population), X_{15} (total employment rate of scheduled caste population), x_{16} (per capita income), X_{24} (number of hospitals per lakh population), X_{30} (rural female employment rate of scheduled caste population) and X_{31} (urban female employment rate of scheduled caste population) .Rest of the four indicators are showing inverse relationship. They are X_8 (net irrigated area), X_{12} (scheduled caste total employment rate), X_{17} (literacy rate of scheduled caste population) and X_{27} (length of metalled road per thousand square kilometer).

This discussion leads to conclusion that X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population),), X_{30} (rural female employment rate of scheduled caste population), X_{31} (urban female employment rate of scheduled caste population) are the chief determinants but the magnitude of their effects are dissimilar.

Rural and Urban Distribution

The results of simple linear relationship of employment groups of rural female population are almost similar to the results of employment groups of total population. It has been found that almost all the indicators are similar in the direction of relationship though in degrees they differ considerably as inferred from the table no 4.20. It may be concluded that the regional variation in employment rate of rural female scheduled caste population is mainly caused by X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{29} (scheduled caste total female employment rate), X_{31} (scheduled caste urban female employment rate) are the chief determinants but the magnitude of their effects are dissimilar.

The results of simple linear relationship of employment groups of urban female scheduled caste population shows that fourteen indicators are significant as observed in the table no. 4.20. In these significant indicators eight indicators are significant at 95 percent level of confidence and leaving the variable X_6 (cropping intensity), all the other seven indicators are positively correlated. These indicators are X_5 (per capita net sown area), X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{24} (number of hospitals per lakh population) and X_{26} (number of primary health care centers per lakh population).

Rests of the six indicators are significant at 99 percent level of confidence. Among them three indicators X_3 (per cent of scheduled caste population to the total population), X_4 (sex ratio of scheduled caste population) and X_{24} (number of hospitals per lakh population) whereas X_7 (net cropped area to the total cultivated area) X_8 (net irrigated area) and X_9 (irrigation intensity) are positively correlated.

It may be concluded that the regional variation in employment rate of urban female scheduled caste population is mainly caused by X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{29} (scheduled caste total female employment rate), X_{30} (scheduled caste rural female employment rate) are the chief determinants but the magnitude of their effects are dissimilar.

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CHAPTER 5

EMPLOYMENT STRUCTURE AND EMPLOYMENT REGIONS OF SCHEDULED CASTE

Employment Structure of Scheduled Caste Population

Employment structure refers to the distribution of working force into various sectors of the economy. It is not easy to enumerate the economic activities into a certain number. The census of India, 2001 has divided economic activities into seventeen comprehensive categories. They are i. Agriculture, Hunting and forestry ii. Fishing iii. Mining and Quarring iv. Manufacturing v. Electricity ,Gas and Water Supply vi. Construction vii. Wholesale and Retail Trade viii. Hotels and Restaurants ix. Transport, Storage and Communications x. Financial Intermediation xi. Real Estate, Renting and Bussiness Activities xii. Public Administration and Defence, Compulsory Social Security xiii. Education xiv. Health and Social Work xv. Other Community, Social and Personal Service Activities xvi. Private Household with Employed Persons xvii. Extra Territorial Organizations and Bodies.

These economic activities may be classified into three groups namely primary, secondary and tertiary economic activities. The primary group of occupation includes the first three heads of seventeen categories of employment. The secondary group of occupation includes its fourth, fifth and sixth categories. Rests of the eleven categories lie in tertiary economic activity.

The aim of the present chapter is bifocused. The first is oriented to the district wise analysis of scheduled caste population by major employment groups. Second is intended to show the association of major employment groups with some selected demographic and non demographic indicators. This association is shown through the simple linear correlation and factor analysis.

The occupational distribution of scheduled caste population in Uttar Pradesh in heavily biased in favour of agriculture. The primary group of occupation is the most dominant one in Uttar Pradesh as well as in India. About 71.55 per cent of the total scheduled caste working population of the state is engaged in primary occupation, whereas, it is 65.39 per cent in the country. Secondary group of occupation of the scheduled caste working peoples takes second position and it accounts 14.76 per cent of the state working population 16.31 per cent in the country. The share of tertiary occupations of scheduled caste working population is slightly lower than the secondary occupations. It is 13.69 per cent for the scheduled caste working population of the state and 18.30 per cent for the scheduled caste working population of the country. The break up of the most dominant primary group is dissimilar; 41.92 per cent of the working scheduled caste population of the state is working as agricultural labourers, 55.26 per cent as cultivators, and rest 2.88 per cent in the other primary activities.

The dominance of the category of primary occupation is found to its greater extent in the rural population of both the state and country. Its share is 79.50 per cent in rural population whereas 71.55 in total population. The largest share of it goes to cultivation which is as high as 53.75 per cent in the state and 39.79 per cent in the India. Agricultural labourers comes next with a share of 41.61 per cent and 59.82 per cent for the state and the nation respectively. Other primary activities jointly share as low as 2.66 per cent of the total working population of the state and 5.37 per cent of India.

The primary occupations have substantial percentage even in the urban population of both the state and the country. However, primary occupations account for 12.32 per cent of urban main scheduled caste working population of the state and 14.69 per cent of the country. This indicates a heavy pressure of main working population of the scheduled caste on primary occupations and the lack of diversified economy which can broaden the employment base. The share of secondary group of occupation of the scheduled caste in the state

is 14.76 per cent, of which 4.32 per cent in household industries, 5.82 per cent in non household industries, 0.21 per cent in electricity, gas and water supply and 4.39 per cent in construction. The country's scheduled caste share in the secondary occupation is 16.31 per cent in which 3.72 per cent, 6.53 per cent, 0.38 per cent and 5.67 per cent are distributed in household industries, non household industries, electricity gas and water supply, construction respectively. The category of tertiary occupation accounts for 13.68 per cent of the total main workers of the scheduled caste of the state which is fairly less than the nation's share i.e., 18.29.

Primary Group of Occupation of Scheduled Caste Population

General Distribution

It is already discussed that primary employment is quite common among the scheduled caste people. The primary occupation is marked with notable variations in its distribution among the districts of the state. It varies from 29.05 per cent in Balrampur to 5.31 per cent in Ghaziabad. This variation is divided into following five groups as shown in the fig 5.1. Very High (above 21.57 per cent), High (18.96 to 21.57 per cent), Medium (16.36 per cent to18.96 per cent), Low (13.76 per cent to16.36 per cent) and Very Low (below 13.16 per cent)

The category of very high rate of total scheduled caste primary employment is found in one-seventh districts of the state. A big continuous region of this group is formed by the eastern districts namely Kheri, Bahraich, Shrawasti, Balrampur, Gonda, Barabanki, Sitapur and Hardoi. The high rate of employment is also observed in one-seventh districts of the state, five southern districts among them form a identifiable region. These districts are Unnao, Fatehpur, Kaushambi, Banda and Mahoba.

Medium level of primary employment rate of total scheduled caste population in observed in twenty two per cent districts of the state. Most of these districts

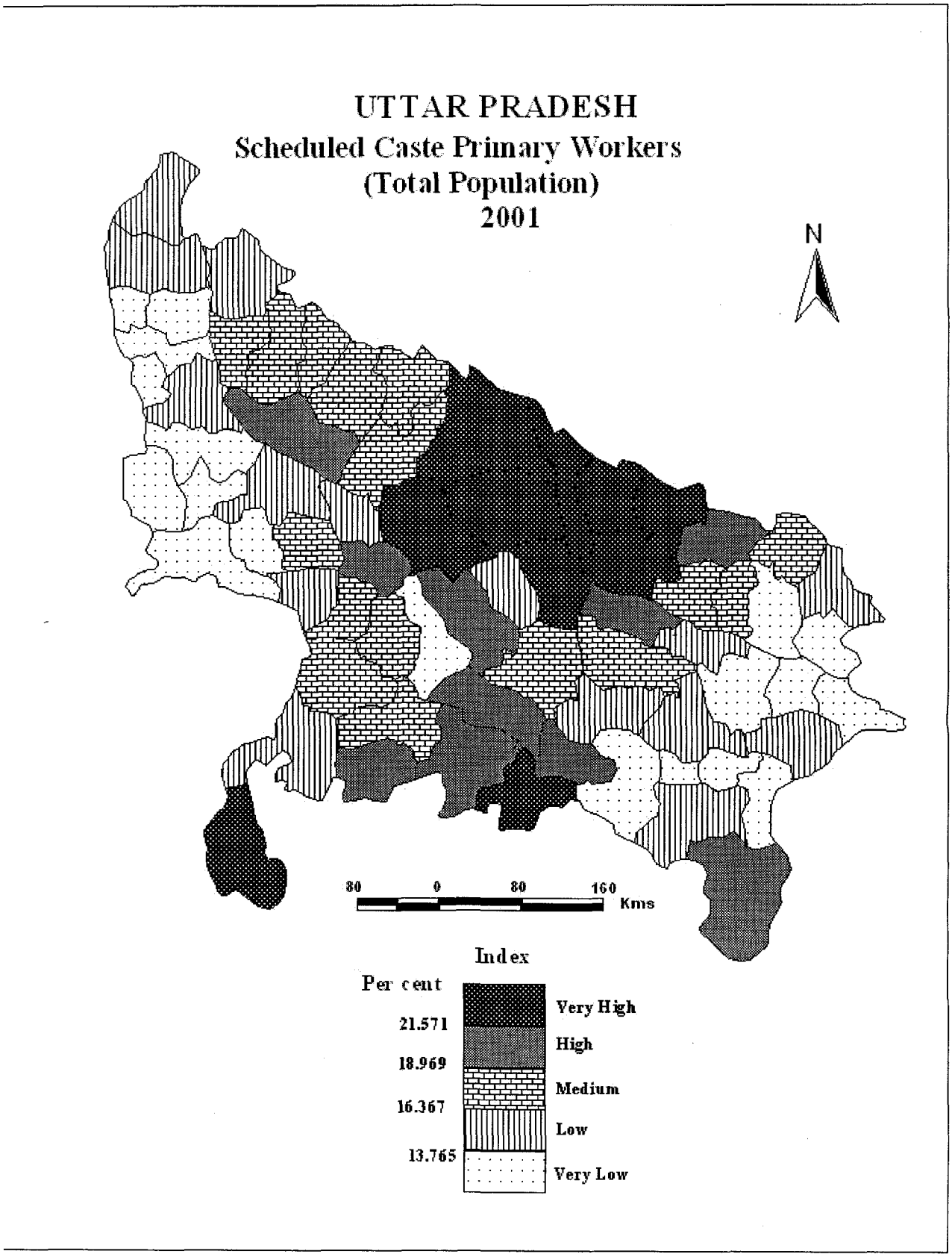
UTTAR PRADESH
Scheduled Caste Primary Workers
(Total Population)
2001
N
80 0 80 160
Kms
Index
Per cent
21.571
18.969
16.367
13.765
Very High
High
Medium
Low
Very Low

Fig. 5.1

Table 5.1 District wise Per cent Distribution of Population (Main Workers) in Primary Occupations, Uttar Pradesh, 2001

District	Total	Rural	Urban
Saharanpur	14.05	15.27	3.78
Muzaffarnagar	15.13	16.73	6.41
Bijnor	15.75	16.73	5.44
Moradabad	17.28	20.51	2.80
Rampur	18.68	19.90	7.23
Jyotiba Phule Nagar	17.12	18.89	5.72
Meerut	8.60	13.12	2.10
Baghpat	10.11	11.45	2.57
Ghaziabad	5.31	9.93	1.05
Gautam Buddha Nagar	7.91	9.82	2.12
Bulandshahar	15.92	17.91	3.65
Aligarh	11.18	13.92	1.62
Hathras	11.30	12.89	3.06
Mathura	12.50	15.04	2.02
Agra	6.84	11.48	0.97
Firozabad	8.35	11.15	0.75
Etah	16.14	18.26	3.28
Mainpuri	16.50	18.37	3.00
Budaun	19.78	21.46	7.56
Bareilly	16.37	19.59	3.07
Pilibhit	16.96	18.43	2.72
Shahjahanpur	18.84	20.64	3.10
Kheri	23.14	23.80	7.06
Sitapur	22.48	23.12	5.45
Hardoi	23.67	24.37	7.64
Unnao	21.02	22.22	5.74
Lucknow	13.82	19.39	1.69
Rae Bareli	18.27	19.02	3.60
Farrukhabad	16.18	18.83	4.03
Kannauj	19.09	20.80	4.84
Etawah	14.17	16.30	2.33
Auraiya	17.78	18.90	5.35
Kanpur Dehat	17.15	17.74	4.89
Kanpur Nagar	10.33	18.45	0.82
Jalaun	16.96	20.04	3.71
Jhansi	15.50	22.02	2.04
Lalitpur	24.48	26.54	2.21
Hamirpur	18.38	20.82	5.18
Mahoba	21.20	24.21	6.39
Banda	20.79	22.96	5.32

Table 5.1 (Continued)

Chitrakoot	24.67	26.36	2.02
Fatehpur	19.13	20.03	4.80
Pratapgarh	15.31	15.61	4.51
Kaushambi	20.16	20.59	10.19
Allahabad	13.17	15.20	1.23
Barabanki	24.64	25.09	10.18
Faizabad	20.69	21.69	3.97
Ambedkar Nagar	16.22	16.62	4.46
Sultanpur	16.95	17.24	3.43
Bahraich	24.17	24.96	2.19
Shravasti	27.50	27.69	2.49
Balrampur	29.05	29.98	3.03
Gonda	22.75	23.35	3.60
Siddharthnagar	21.15	21.55	4.32
Basti	18.22	18.92	1.32
Sant Kabir Nagar	16.58	17.05	5.31
Maharajganj	17.61	18.09	5.07
Gorakhpur	10.52	11.64	1.53
Kushinagar	16.25	16.52	5.79
Deoria	10.74	11.29	2.44
Azamgarh	13.26	13.67	2.11
Mau	12.22	12.96	3.93
Ballia	11.07	11.50	4.41
Jaunpur	14.10	14.50	1.89
Ghazipur	15.03	15.53	2.82
Chandauli	11.68	12.42	2.14
Varanasi	6.25	7.94	0.70
Sant Ravidas Nagar	5.59	5.92	0.92
Mirzapur	15.76	16.72	2.46
Sonbhadra	20.21	21.31	2.75
Uttar Pradesh	**16.21**	**18.1**	**2.68**

Source: Census of India, 2001

are distributed into two pockets; one western pocket is composed of the districts Jyotiba Phulu Nagar, Moradabad, Rampur, Bareilly, Piliphit and Shahjahanpur. The other southern pocket is formed by the districts Farrukhabad, Kanpur Dehat, Jalaun and Mainpuri districts.

Low level of total scheduled caste primary employment rate is observed in twenty one per cent districts of the state. These districts do not form any big identifiable region. Very low level of primary employment rate is observed

into four distinct regions. Two regions among them are found in western Uttar Pradesh and two regions in the eastern part of the state.

Rural and Urban Distribution, 2001

The distribution of rural primary workers of scheduled caste is almost same as that of the total primary workers. The rate of rural scheduled caste workers varies from 29.98 per cent in Balrampur to 7.94 per cent in Varanasi districts. The whole range of index is divided into following five groups as shown in the fig 5.2. Very High (above 22.91 per cent), High (20.49 per cent to 22.93 per cent), Medium (18.04 per cent to 20.48 per cent), Low (15.59 per cent to 18.04 per cent) and Very low (below15.59 per cent). Very high grade of rural employment rate is observed in the form of two distinct regions, in which one region is formed by the eastern districts Kheri, Bahraich, Shrawasti, Balrampur, Barabanki, Sitapur and Hardoi. The other region is formed by the southern districts Mohoba, Banda and Chitrakoot districts. High grade of rural scheduled caste primary employment rate is identified in those eleven districts which lie adjacent to the very high grade of the same. Only three western districts Rampur, Badaun and Shahjahanpur among them form a tiny identifiable region.

Medium level of rural scheduled caste primary employment rate is seen in around twenty one per cent districts. These districts form three identifiable regions, two in the western and one in the central part of the state. One of the western regions of this grade is constituted by the districts Rampur, Bareilly and Pilibhit. The other western region is formed by the districts Etah, Farrukhabad and Mainpuri districts. The central region is comprised of the districts of Lucknow, Rae Bareilly, Mahoba and Kanpur Nagar. Low level of scheduled caste primary employment rate is observed in around fifteen percent district of the state. Only one identifiable region of this grade is formed by four eastern districts Sant Kabir Nagar, Ambedkar Nagar,

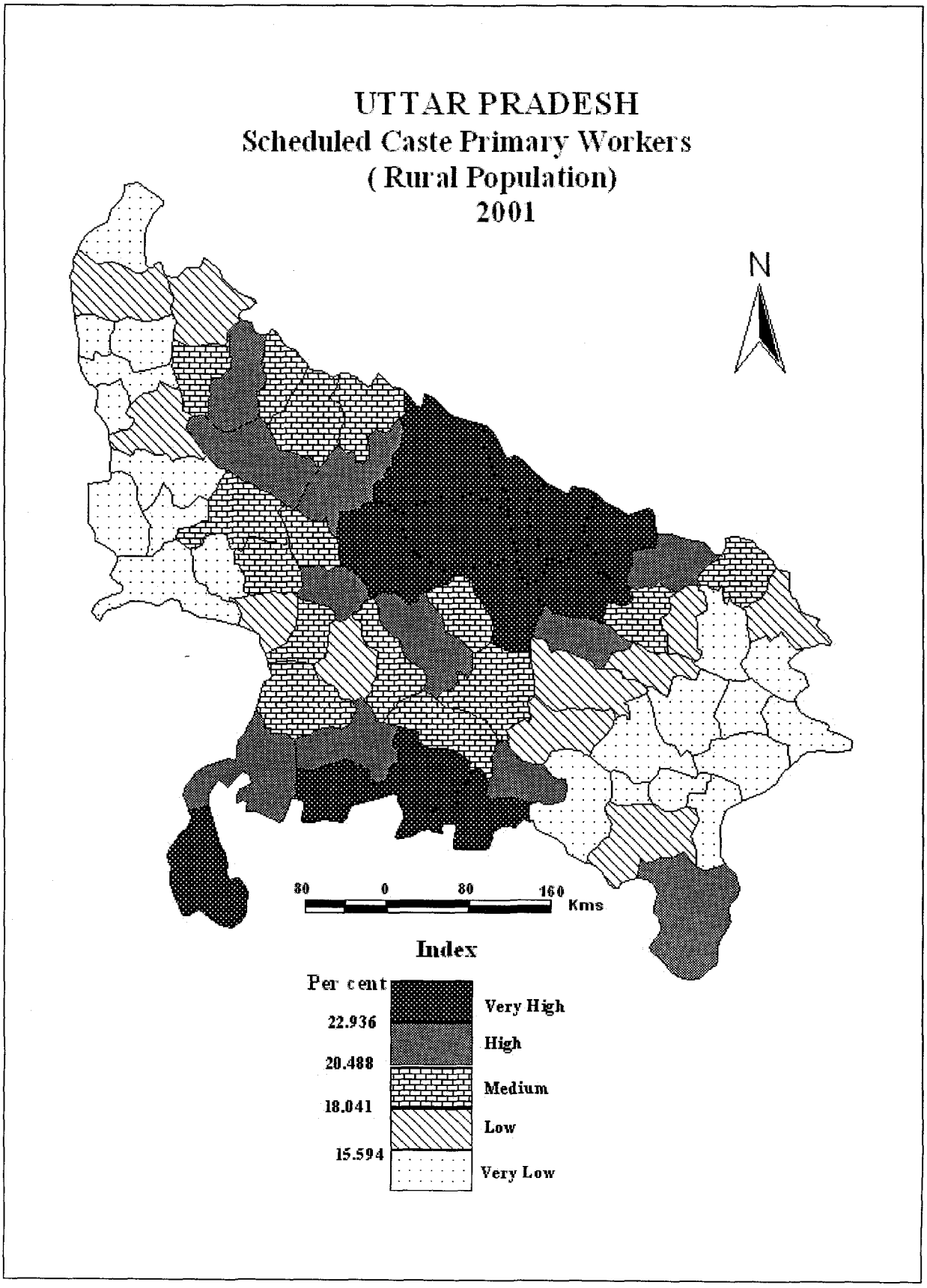
UTTAR PRADESH
Scheduled Caste Primary Workers
(Rural Population)
2001
N
80
0
80
160
Kms
Index
Per cent
22.936
20.488
18.041
15.594
Very High
High
Medium
Low
Very Low

Fig. 5.2

Sultanpur and Pratapgarh. Thirty per cent districts of the state lie in the category of very low level of scheduled caste rural employment rate. These districts are confined into three distinct regions, one big region in the eastern part of the state and two smaller regions in the western part of the state. The districts of eastern pocket are Deoria, Gorakhpur, Azamgarh, Ghazipur, Chandauli, Sant Ravidas Nagar, Jaunpur, Allahabad, Chitrakoot, Mirzapur and Sonbhadra. The first western pocket is formed by the districts Baghpat, Meerut, Ghaziabad and Gautam Buhda Nagar. The second western pocket is comprised of the western districts Aligarh, Mathura, Agra, Firozabad and Etawah.

Table no. 5.1 shows that urban scheduled caste primary employment rate varies from 10.18 per cent in Barabanki to 10.18 per cent in Varanasi districts. This whole range is divisible into the five categories. These categories along their values are as follows: Very High (above 5.784 per cent), High (4.80 per cent to 5.78 per cent), Medium (3.69 per cent to 4.00 per cent), Low (2.91 per cent to 3.68 per cent) and Very Low (below 2.91 per cent). The distribution of these grades is found to be very irregular. The category of very high level of scheduled caste urban primary employment rate is identified in around thirteen per cent districts of the state which do not form any recognizable region.

The category of high level of scheduled caste urban primary employment rate is recognized in twenty four per cent districts of the state. A discontinuous region of this grade in formed by the districts Farrukhabad, Kannauj, Auraiya, Kanpur Dehat, Hamirpur, Banda, Fatehapur and Unnao. The other smaller region of this grade is formed by the eastern districts Maharajganj, Sant Kabir Nagar and Sidharthnagar. The category of medium grade is observed in only four scattered districts. These districts are Saharanpur, Jalaun, Faizabad and Mau. Low level of scheduled caste urban primary employment rate is found in one-seventh districts of the state which don't form any recognizable region.

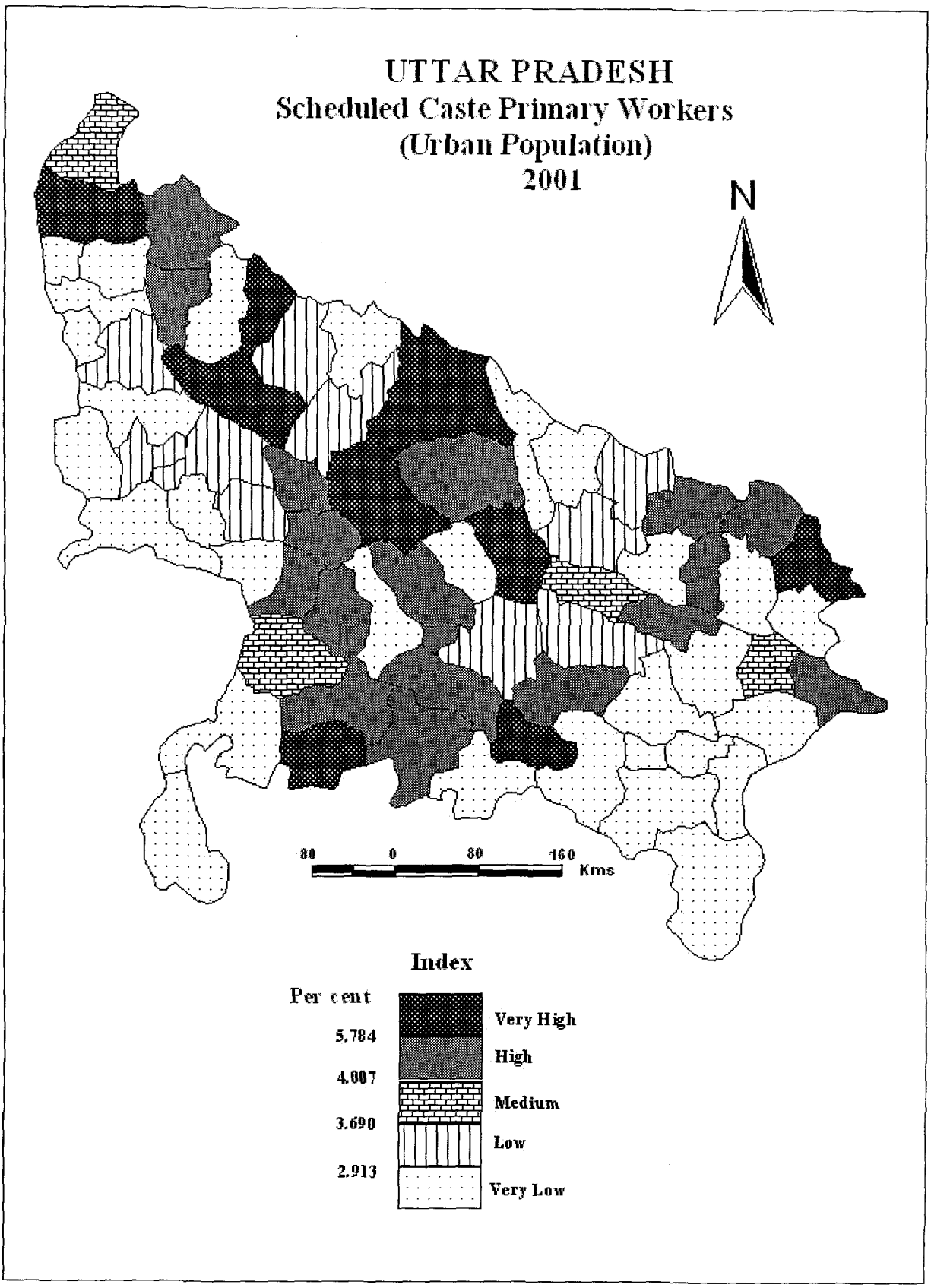
UTTAR PRADESH
Scheduled Caste Primary Workers
(Urban Population)
2001
N
80
0
80
160
Kms
Index
Per cent
5.784
4.007
3.690
2.913
Very High
High
Medium
Low
Very Low

Fig. 5.3

Very low level of scheduled caste urban primary employment rate is found in around forty three per cent districts of the state. Majority of them are distributed into three distinct regions, one big region in the eastern part and two regions in the western part of the state.

Secondary Group of Occupation of Scheduled Caste Population, 2001

General Distribution

As far as the secondary employment group of scheduled caste people is concerned, it varies from 11.16 per cent in Sant Ravidas Nagar to 0.96 per cent in Shrawasti district. The whole range of this variation is divided into following five categories, namely, Very High (above 5.61 per cent), High (4.49 per cent to 5.66 per cent), Medium (3.36 per cent to 4.49 per cent), Low (2.11 per cent to 3.36 per cent) and Very Low (below 2.11 per cent).

Fig 5.4 shows that the distribution of these grades is highly uneven. The category of very high rate of total scheduled caste secondary workers is observed in around fifteen per cent districts of the state. A single identifiable region of this grade is formed by the eastern districts Shrawasti, Balrampur Gonda, Basti and Sant Kabir Nagar. High rate of total scheduled caste employment rate is observable in one-seventh districts of the state. These districts are scattered over the whole state. The third category of medium grade is identified in twenty per cent districts of the state. These districts also do not form any recognizable region.

The low grade of total scheduled caste secondary workers is observed in around twenty four per cent districts of the state. Apart from scattered districts of this grade, few districts are distributed in the form of tiny regions. One tiny region of this grade is formed by the eastern districts Kushinagar, Deoria and Ballia. The other eastern pocket is formed by the districts Azamgarh, Sultanpur, Rae Barailly and Barabanki. The third tiny pocket of this grade is formed by the district Hardoi, Farrukhabad and Mainpuri. Very low level of

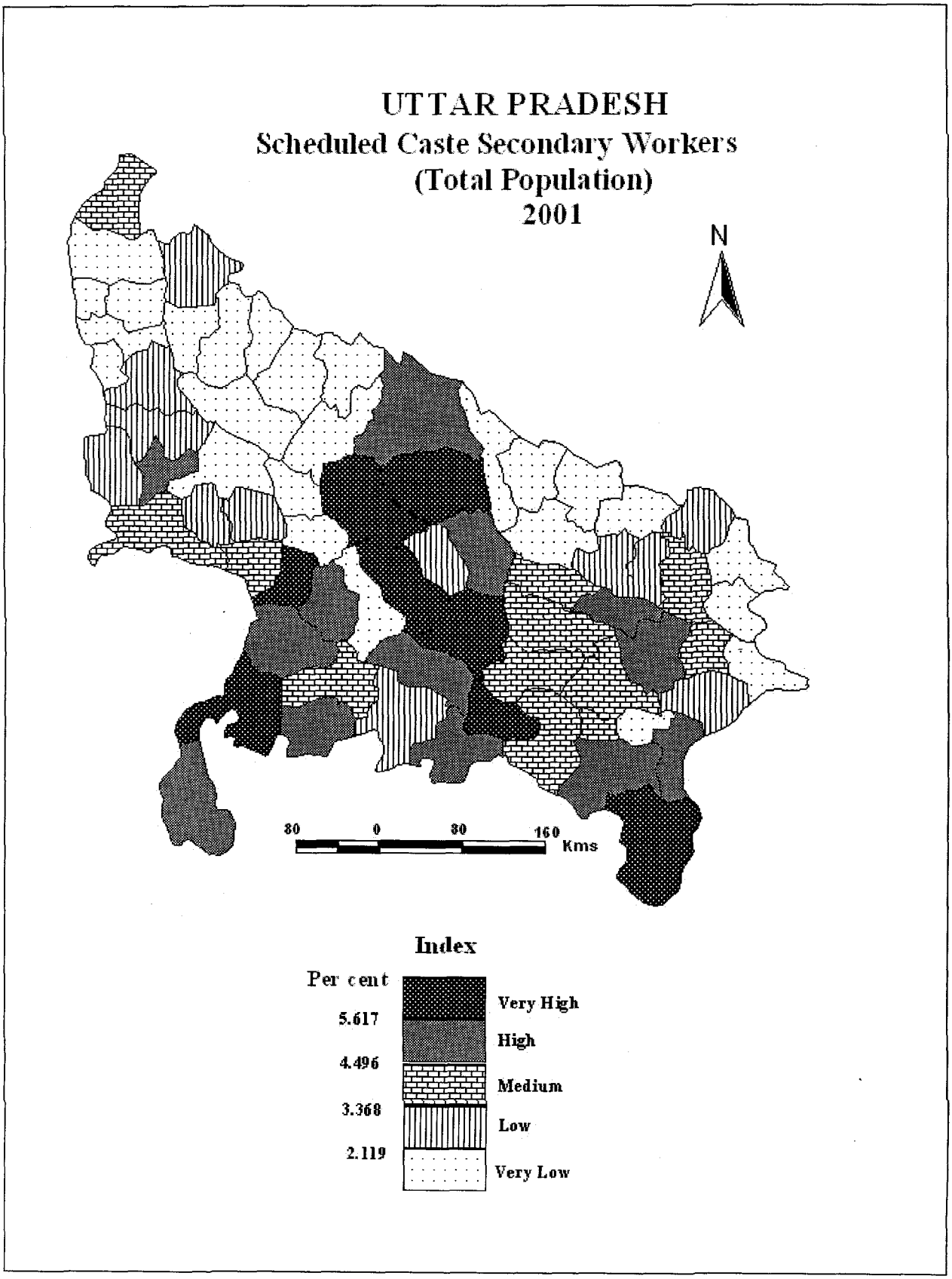
UTTAR PRADESH
Scheduled Caste Secondary Workers
(Total Population)
2001
N
80
0
80
160
Kms
Index
Per cent
5.617
4.496
3.368
2.119
Very High
High
Medium
Low
Very Low

Fig. 5.4

Table 5.2 District wise Per cent Distribution of Population (Main Workers) in Secondary Occupations, Uttar Pradesh, 2001

District	Total	Rural	Urban
Saharanpur	4.49	4.20	6.88
Muzaffarnagar	5.12	4.78	6.97
Bijnor	2.23	1.97	5.00
Moradabad	3.94	3.25	7.03
Rampur	1.38	1.12	3.89
Jyotiba Phule Nagar	3.30	2.67	7.30
Meerut	7.66	7.11	8.46
Baghpat	5.01	4.88	5.78
Ghaziabad	8.18	6.23	9.98
Gautam Buddha Nagar	5.55	4.18	9.72
Bulandshahar	5.02	4.75	6.71
Aligarh	5.73	4.43	10.29
Hathras	4.60	4.02	7.58
Mathura	6.95	6.41	9.16
Agra	9.43	7.07	12.42
Firozabad	8.32	5.76	15.28
Etah	2.75	2.10	6.74
Mainpuri	1.98	1.55	5.06
Budaun	1.51	1.15	4.16
Bareilly	1.79	1.21	4.20
Pilibhit	1.59	1.36	3.79
Shahjahanpur	1.81	1.26	6.59
Kheri	1.10	0.91	5.53
Sitapur	1.26	1.14	4.50
Hardoi	1.42	1.22	5.96
Unnao	2.30	1.94	6.84
Lucknow	3.57	2.44	6.03
Rae Bareli	2.05	1.87	5.65
Farrukhabad	2.69	1.68	7.31
Kannauj	2.68	2.11	7.42
Etawah	3.16	2.56	6.49
Auraiya	2.54	2.36	4.59
Kanpur Dehat	2.65	2.53	5.24
Kanpur Nagar	5.56	3.14	8.41
Jalaun	2.73	1.61	7.54
Jhansi	4.69	2.48	9.24
Lalitpur	2.47	1.98	7.78
Hamirpur	3.32	2.67	6.87
Mahoba	4.13	3.29	8.25
Banda	3.49	2.88	7.86

Table 5.2 (Cotinued)

Chitrakoot	2.19	1.73	8.35
Fatehpur	2.93	2.65	7.34
Pratapgarh	2.02	1.95	4.63
Kaushambi	2.17	2.05	4.87
Allahabad	4.32	4.10	5.56
Barabanki	1.44	1.35	4.58
Faizabad	2.43	2.16	6.88
Ambedkar Nagar	2.30	2.11	8.07
Sultanpur	2.52	2.45	5.78
Bahraich	1.36	1.20	5.74
Shravasti	0.95	0.85	13.33
Balrampur	1.67	1.50	6.52
Gonda	1.28	1.08	7.63
Siddharthnagar	1.08	0.97	5.39
Basti	1.41	1.32	3.57
Sant Kabir Nagar	1.53	1.36	5.65
Maharajganj	1.39	1.23	5.43
Gorakhpur	2.52	2.20	5.06
Kushinagar	1.59	1.53	4.01
Deoria	1.93	1.74	4.89
Azamgarh	2.78	2.57	8.54
Mau	2.92	2.53	7.30
Ballia	2.56	2.39	5.17
Jaunpur	3.17	3.06	6.59
Ghazipur	2.63	2.51	5.60
Chandauli	2.78	2.66	4.37
Varanasi	9.99	10.57	8.09
Sant Ravidas Nagar	11.16	10.79	16.50
Mirzapur	5.92	5.71	8.84
Sonbhadra	2.68	2.22	10.07
Uttar Pradesh	**3.34**	**2.7**	**7.91**

Source: Census of India, 2001

total scheduled caste secondary employment rate is observed in around twenty five per cent districts of the state. A small pocket of this grade is formed by four western districts Aligarh, Hathras, Agra and Firozabad. The other belt of this grade is constituted by eight districts Mahoba, Hamirpur, Fatehpur, Unnao, Kaushambi, Pratapgarh, Jaunpur and Sant Ravidas Nagar.

Rural and Urban Distribution

Rural scheduled caste secondary employment rate varies from 10.79 per cent is Sant Ravidas Nagar to 0.85 per cent in Shrawasti districts. The five groups

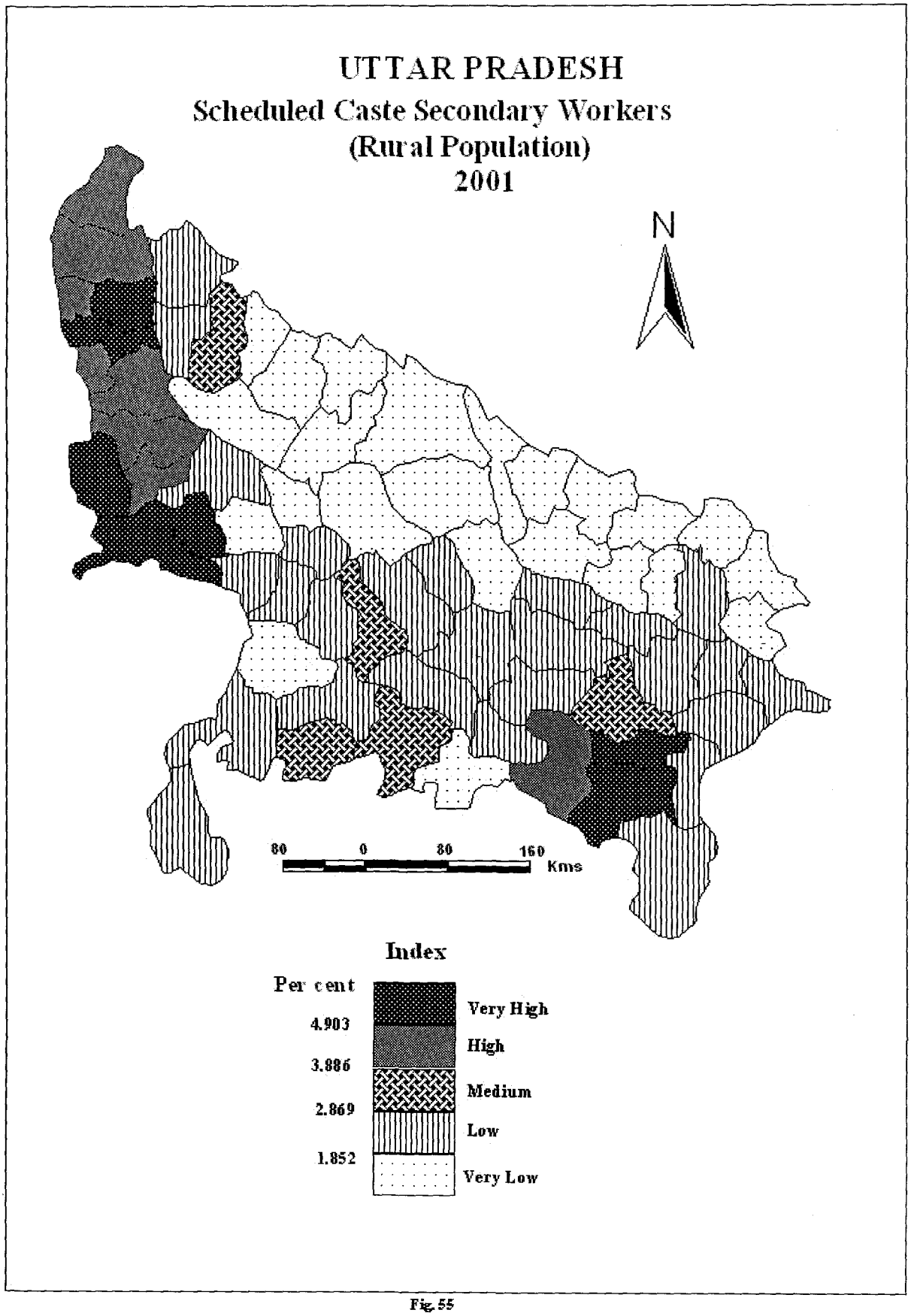
UTTAR PRADESH
Scheduled Caste Secondary Workers
(Rural Population)
2001
N
80
0
80
160
Kms
Index
Per cent
4.903
3.886
2.869
1.852
Very High
High
Medium
Low
Very Low

Fig. 55

of this grade along their values are as follows: Very High (above 4.90 per cent), High (3.88 per cent to 4.90 per cent), Medium (2.86 per cent to 3.87 per cent), Low (1.85 per cent to 2.85 per cent) and Very Low (below1.85 per cent). The distribution of these grades is quite regular. Fig 5.5 shows that the category of very high grade is identified in three tiny pockets. First pocket is formed by the western districts Meerut and Ghaziabad. The second pocket is formed by the western districts of Mathura, Agra and Firozabad. The third pocket is formed by the southern districts of Mahoba, Banda and Chitrakoot.

The category of high level of rural scheduled caste secondary employment rate is constituted by eleven per cent districts of the state. Seven among them are concentrated in the western part of the state in the form of discontinuous region running from Saharanpur to Aligarh. The category of medium level of rural scheduled caste secondary employment rate is observed in only five widely spaced districts, namely, Moradabad, Kanpur Nagar, Jaunpur, Mahoba and Banda. Low level of rural scheduled caste secondary employment rate is found in around thirty seven per cent districts of the state. Majority of them are confined in the central and southern part of the state in the form of discontinuous region. Very low level of scheduled caste rural secondary employment rate is observed in the form of big region running from Rampur in the west, Mainpuri in the south west to Deoria in the east.

The scheduled urban secondary employment rate varies from 16.50 per cent is Mirzapur district to 3.57 per cent in Basti district. The five categories of this range are; Very High (above 9.47 per cent), High (8.23 per cent to 9.47 per cent), Medium (6.98 per cent to 8.23 per cent), Low (5.73 per cent to 6.98 per cent) and Very Low (below 5.73 per cent) which is shown in the figure 5.6. The first category of very high level of urban scheduled caste secondary employment rate is identified in eleven per cent districts of the state. These districts are widely spaced and don't form any recognizable region. High level of urban secondary employment rate is also observed in eleven per cent districts of the state and these districts are scattered over the space.

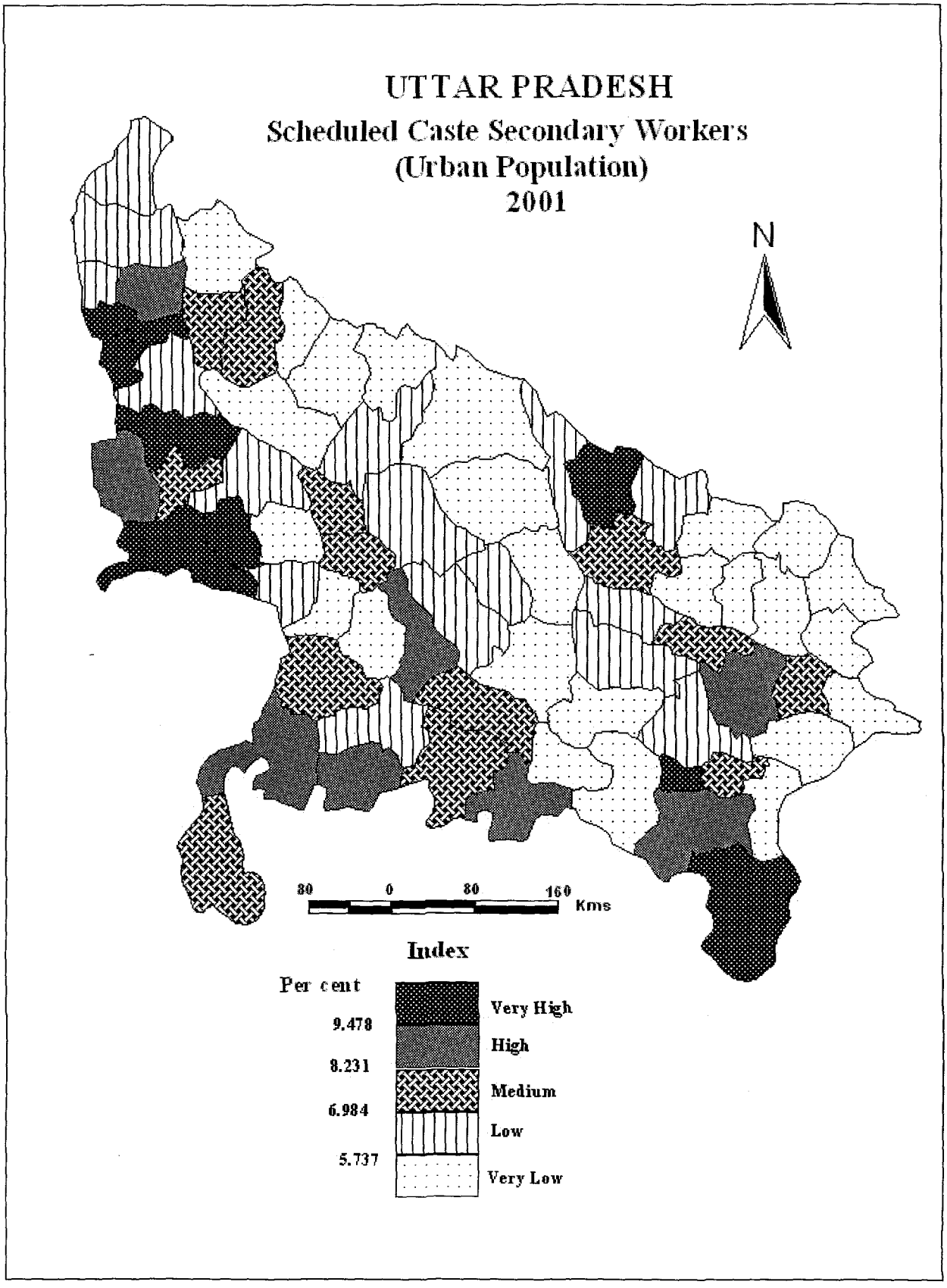
UTTAR PRADESH
Scheduled Caste Secondary Workers
(Urban Population)
2001
N
80 0 80 160 Kms
Index
Per cent
9.478
8.231
6.984
5.737
Very High
High
Medium
Low
Very Low

Fig. 5.6

Medium level of urban secondary employment rate is observed is around eighteen per cent districts of the state and these districts also do not form any identifiable region. Low level of urban secondary employment rate of scheduled caste is observed in twenty three per cent districts of the state. Apart from few widely scattered districts, most of the districts of this group are confined in the form few smaller pockets. One pocket is formed by three western districts Saharanpur, Muzzafar Nagar and Baghpat. The other pocket is formed by the districts Shahjanhpur, Hardoi, Lucknow and Unnao. The third region of this grade is formed by the districts of Faizabad, Sultanpur and Jaunpur. Very low level of scheduled caste urban secondary employment rate is observed in two identifiable belts. The first belt is formed by the districts Badaun, Rampur Bareilly, Pilibhit, Kheri, Sitapur, Barabanki, Baeilly Pratapgarh, Kaushambi and Allahabad. The second pocket is formed by the eastern districts Kushi Nagar Sidharth Nagar, Maharajgang, Basti, Sant Kabir Nagar, Gorakhpur, Deoria, Ballia, Ghazipur and Chandauli .

Tertiary Group of Occupation of Scheduled Caste People

General Distribution

The range of variation of the tertiary employment rate of scheduled caste people is quite narrow. It varies from 8.83 per cent in Ghaziabad to 1.14 per cent in Shrawasti district. The five categories of this whole range are Very High (above 4.7 per cent), High (3.90 per cent to 4.71 per cent), Medium (3.09 per cent to 3.89 per cent), Low (2.28 per cent to 3.09 per cent) and Very Low (below2.28 per cent).

Fig 5.7 shows that the districts of very high level of tertiary employment rate are mostly confined in the western part of the state. They form a discontinuous region with the districts Mazzafar Nagar, Meerut, Baghpat, Ghaziabad, Gautam Budha Nagar, Bulandshahar, Mathura and Agra. The districts of high level of total scheduled caste tertiary workers are also confined in the western part of the state but they do not form any region.

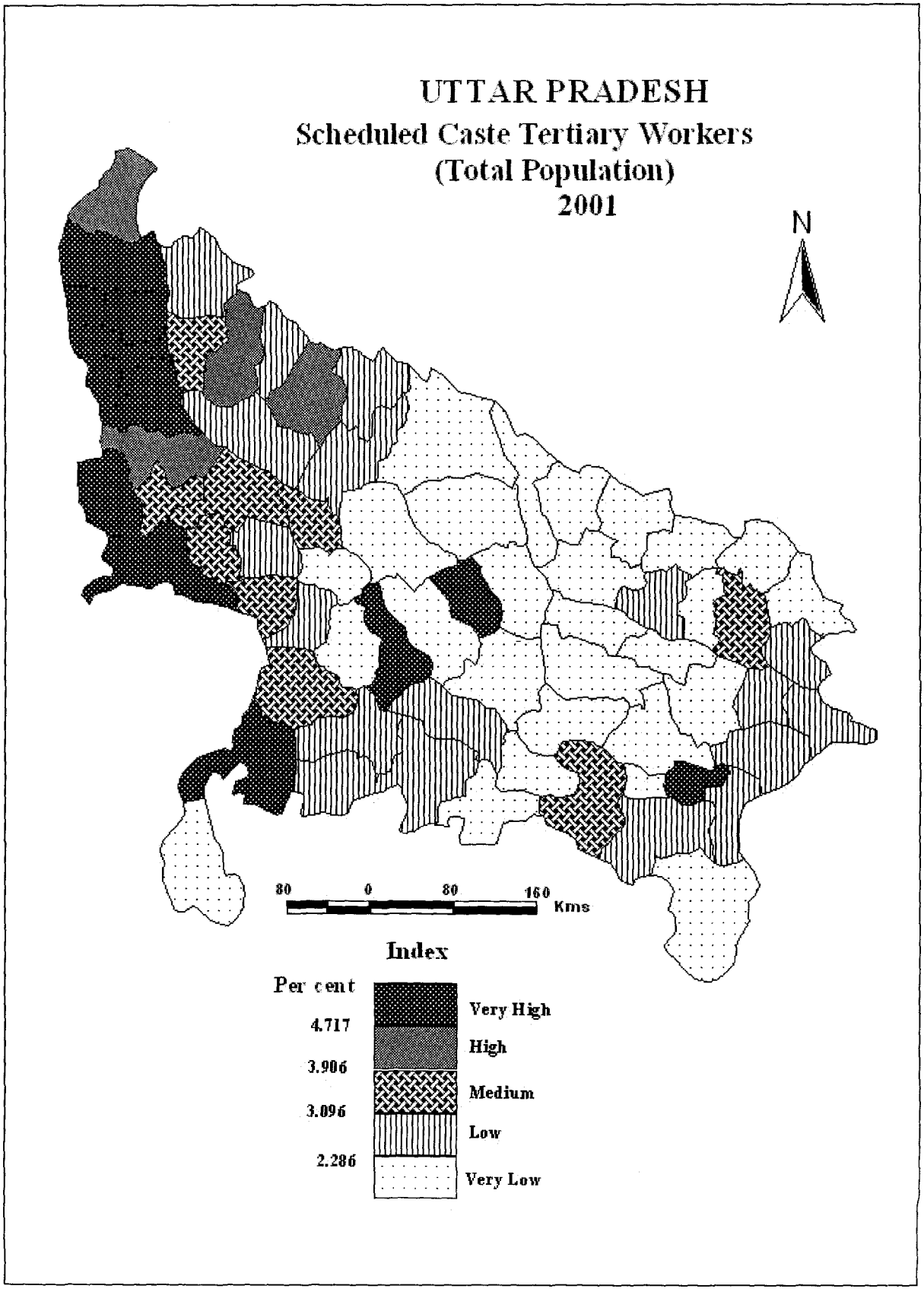
UTTAR PRADESH
Scheduled Caste Tertiary Workers
(Total Population)
2001
N
80 0 80 160
Kms
Index
Per cent
4.717
3.906
3.096
2.286
Very High
High
Medium
Low
Very Low

Fig. 5.7

Table 5.3 District wise Percentage Distribution of Population (Main Workers) in Tertiary Occupations, Uttar Pradesh, 2001

District	Total	Rural	Urban
Saharanpur	4.68	3.82	11.90
Muzaffarnagar	4.78	3.54	11.62
Bijnor	2.91	2.36	8.73
Moradabad	4.46	2.77	12.00
Rampur	2.51	1.43	12.59
Jyotiba Phule Nagar	3.76	2.42	12.35
Meerut	6.72	4.21	10.33
Baghpat	4.86	3.86	10.47
Ghaziabad	8.83	5.35	12.05
Gautam Buddha Nagar	7.16	4.97	13.81
Bulandshahar	5.35	4.14	12.84
Aligarh	4.03	2.86	8.12
Hathras	3.27	2.32	8.19
Mathura	4.95	3.50	10.91
Agra	5.08	3.15	7.52
Firozabad	3.69	2.66	6.48
Etah	3.16	1.56	12.83
Mainpuri	2.56	1.55	9.82
Budaun	2.74	1.67	10.50
Bareilly	4.37	1.94	14.43
Pilibhit	2.61	1.39	14.44
Shahjahanpur	2.43	1.28	12.54
Kheri	1.63	1.19	12.32
Sitapur	1.60	1.22	11.67
Hardoi	1.60	1.23	9.95
Unnao	1.89	1.38	8.41
Lucknow	6.05	2.12	14.59
Rae Bareli	1.89	1.44	10.81
Farrukhabad	3.30	1.70	10.63
Kannauj	1.77	1.09	7.43
Etawah	3.44	2.03	11.31
Auraiya	2.68	2.03	9.89
Kanpur Dehat	2.16	1.88	7.94
Kanpur Nagar	7.42	2.21	13.52
Jalaun	3.49	1.75	11.00
Jhansi	5.14	2.05	11.54
Lalitpur	2.17	1.10	13.82
Hamirpur	3.00	1.81	9.45
Mahoba	2.51	1.30	8.48
Banda	2.53	1.49	10.00

scheduled caste urban tertiary employment rate is found in around thirty seven per cent districts of the state. A big identifiable region of this group which runs eastern to central and southern part of the state is formed by twenty four districts.

Rural and Urban Distribution

The range of variation of rural tertiary employment is comparatively narrow than the range of variation of figure discussed before. It is varies from 5.35 per cent in Ghaziabad to 1.00 per cent in Bahraich district. The five grades of this range are Very High (above 2.98 per cent), High (2.51 per cent to 2.98 per cent), Medium (2.05 per cent to 2.51 per cent), Low (1.58 per cent to 2.05 per cent), Very Low (below 1.583 per cent).

It is clear from the fig 5.8 that the districts lying in the category of very high level of rural tertiary employment rate is confined in the western part of the state in the form of a region. The districts of this grade are Saharanpur, Muzzafar Nagar, Baghpat, Meerut, Ghaziabad, Gautam Budha Nagar, Bulandshahar, Mathura and Agra. The category of high level is identified in only three western districts such as Aligarh, Moradabad and Firozabad. The medium grade of scheduled caste rural tertiary employment rate is found in seventeen per cent districts of the state. A identifiable region of this grade is formed by the eastern districts of Gorakhpur, Deoria, Mau, Ballia, Ghazipur and Chandauli.

Low level of scheduled caste rural tertiary employment rate is found in around one-fourth districts of state. These districts form three identifiable regions. One western region is formed by the districts Bareilly, Badaun and Farrukhabad. The second region is constituted by the districts Etawah, Auraiya, Kanpur Dehat, Jalaun, Jhansi and Hamirpur. The third region is formed by the districts Basti, Ambedkar Nagar, Azamgarh, Jaunpur, Sant Ravidas Nagar and Mirzapur. The last category of very low level of scheduled caste rural tertiary employment rate is identified in forty per cent districts of

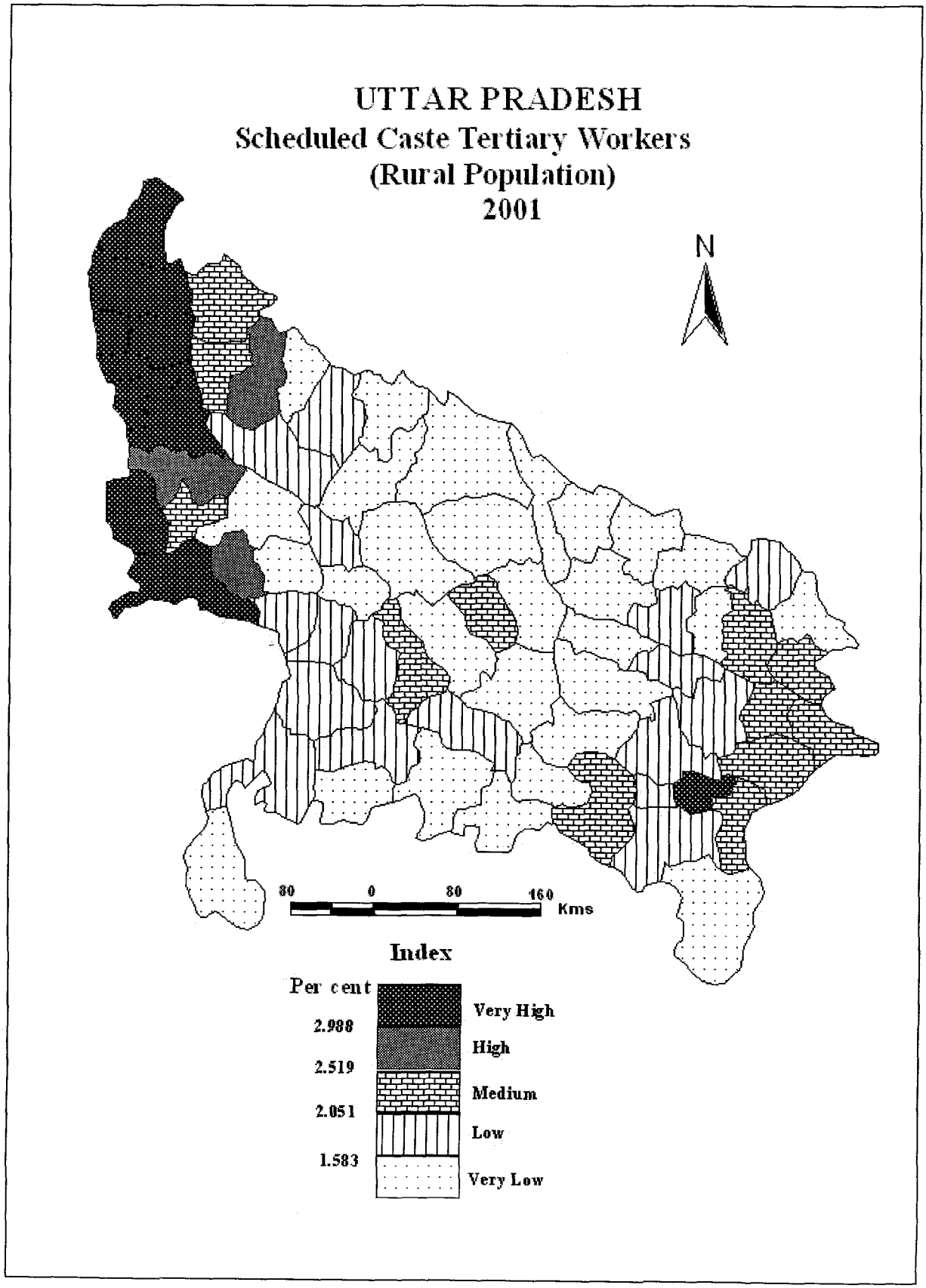
UTTAR PRADESH
Scheduled Caste Tertiary Workers
(Rural Population)
2001
N
80 0 80 160
Kms
Index
Per cent
2.988
2.519
2.051
1.583
Very High
High
Medium
Low
Very Low

Fig. 5.8

the state. Leaving few isolated districts, all the districts of this grade form a big region running from northeastern to central and southwestern part of the state.

The range of variation of urban tertiary employment rate is quite high. It varies from 19.31 per cent in Shrawasti district to 4.82 per cent in Kaushambi districts. This whole range is divided into five groups which are given below. Very High (above 13.67 per cent), High (12.36 per cent to 13.67 per cent), Medium (11.06 per cent to 15 per cent), Low (9.75 per cent to 11.05 per cent) and Very Low (below 9.75 per cent). The distribution of these groups is not very regular as shown in the fig 5.9. The category of very high level of urban scheduled caste tertiary employment rate is observed in fifteen per cent districts of the state. Five eastern districts Shrawasti, Balrampur, Gonda, Basti and Sant Kabir Nagar among them form an identifiable region. High level of scheduled caste urban tertiary employment rate is found in one-seventh districts of the state which do not form any identifiable region.

Medium level of urban scheduled caste tertiary employment rate is observed is fourteen districts of the state. They do not form any observable region of considerable size except a tiny region of three western districts Ghaziabad, Jyotiba Phule Nagar and Moradabad. Low level of scheduled caste urban tertiary employment rate is observed in twenty four per cent districts of the state. There are three identifiable regions of this grade is observed in the state. The first region is constituted by the districts Badaun, Farrukhabad, Mainpuri and Hardoi. The second region is formed by the districts Barabanki, Rae Bareilly, Sultanpur and Azamgarh districts. The third pocket of this category is formed by three eastern districts Kushinagar, Deoria and Ballia.

Very low level of scheduled caste urban tertiary employment rate is found in twenty six districts of the state. Majority of these districts are confined in the form of two identifiable regions. The first region consisted of the four western

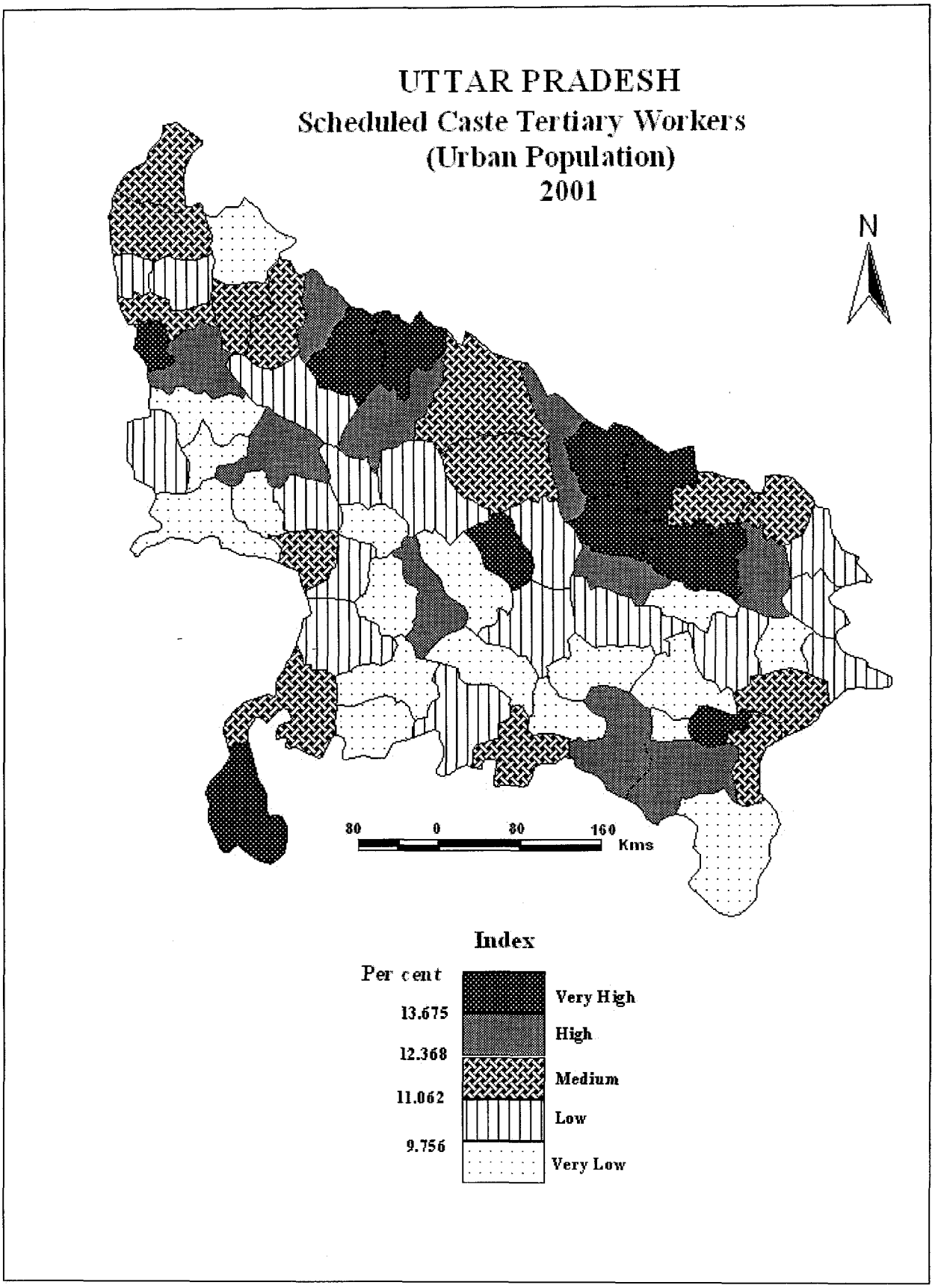
UTTAR PRADESH
Scheduled Caste Tertiary Workers
(Urban Population)
2001
N
80 0 80 160
Kms
Index
Per cent
13.675
12.368
11.062
9.756
Very High
High
Medium
Low
Very Low

Fig. 5.9

districts Aligarh, Hathras, Agra and Firozabad. The other big discontinuous region is confined in most of the central and southern part of the state.

Occupational Groups of Scheduled Caste People and other Selected Indicators

For causal analysis of the occupational structure of the total scheduled caste population, linear correlation based on the table no.5.4 has been prepared for thirty one indicators (twenty eight independent indicators and three dependent indicators) measured for total rural and urban scheduled caste population of all the seventy districts of Uttar Pradesh. In this regard correlation coefficient is computed between determinants and occupational structure, and t test is applied to find out the determinants which are significant at 95 per cent and 99 per cent level of confidence. The general pattern of relationship reports that the indicators which have generally direct relationship with primary occupation (Y_1) have inverse relationship with secondary occupation (Y_2) and tertiary occupation (Y_3) and vice versa.

It is found that the coefficient of correlation of fourteen indicators of total scheduled caste population is significant at 99 per cent level of confidence. They are X_2 (density of scheduled caste population), X_5 (per capita net sown area), X_8 (irrigation intensity), X_{10} (number of working industrial units per lakh population), X_{12} (per cent of scheduled caste urban population), X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{17} (literacy rate of scheduled caste population), X_{20} (number of higher secondary schools per lakh population), X_{25} (number of beds per lakh population), X_{27} (length of metalled road per thousand square kilometers), X_{30} (secondary employment rate of total scheduled caste population) and X_{31} (tertiary employment rate of total scheduled caste population) Leaving the indicators X_5, X_{14}, X_{15} and X_{16} rest of the indicators are negatively correlated.

Table 5.4 Results of Correlation (r) between Major Occupational Groups in Total Scheduled Caste Population and Other Selected Indicators, Uttar Pradesh, 2001.

Indicators	Primary Occupation (Y_1)	Secondary Occupation (Y_2)	Tertiary Occupation (Y_3)
X_1	-0.217	-0.016	-0.007
X_2	-0.575**	0.421**	0.399**
X_3	0.244*	-0.144	-0.354**
X_4	-0.089	-0.239*	-0.351**
X_5	0.488**	-0.223	-0.242*
X_6	-0.129	-0.139	-0.056
X_7	-0.170	0.107	0.229
X_8	-0.545**	0.247*	0.329**
X_9	-0.087	-0.015	0.170
X_{10}	-0.337**	0.279*	0.518**
X_{11}	-0.296*	0.240*	0.485**
X_{12}	-0.592**	0.676**	0.893**
X_{13}	-0.253*	0.197	0.452**
X_{14}	0.623**	-0.300*	-0.415**
X_{15}	0.562**	-0.219	-0.292*
X_{16}	0.425**	-0.054	-0.156
X_{17}	-0.671**	0.502**	0.660**
X_{18}	0.273*	-0.225	-0.228
X_{19}	-0.029	0.017	0.047
X_{20}	-0.403**	0.220	0.309**
X_{21}	-0.175	0.051	-0.118
X_{22}	-0.199	0.061	-0.062
X_{23}	0.231	-0.077	-0.175
X_{24}	0.204	-0.234	-0.225
X_{25}	-0.313**	0.361**	0.497**
X_{26}	0.160	-0.177	-0.230
X_{27}	-0.555**	0.457**	0.536**
X_{28}	-0.119	0.200	0.308**
X_{29}	-	-0.742**	-0.666**
X_{30}	-0.742**	-	0.657**
X_{31}	-0.666**	0.657**	-

****Significance at 1 Per cent Level**
*** Significance at 5 Per cent Level**

Besides these, four indicators in their relationship with primary employment rate of scheduled caste population are found to have significant relation relationship at 95 per cent level of confidence. Among them positively

correlated indicators are X_3 (sex ratio of scheduled caste population) and X_{18} (number of junior basic schools per lakh population). Against the same negatively correlated indicators are X_{11} (persons working in registered industries per lakh population) and X_{13} (per capita income).

For the secondary occupation of the total scheduled caste population twelve indicators are found to have significant relationship with secondary employment rate of total scheduled caste population. Among them seven indicators X_2 (density of scheduled caste people), X_{12} (per cent of scheduled caste urban population), X_{17} (literacy rate of scheduled caste population), X_{25} (numbers of beds per lakh population), X_{27} (length of metalled road per thousand square kilometers), X_{29} (primary employment rate of total scheduled caste population), X_{31} (scheduled caste total tertiary employment rate) are significant at 99 per cent levels of confidence. Leaving the variable X_{29} which is negatively correlated the other six are positively correlated.

The indicators significant at 95 per cent level of confidence are X_4 (sex ratio of scheduled caste population), X_{14} (total employment rate of scheduled caste population), X_8 (net irrigated area), X_{10} (number of working industrial units per lakh population) and X_{11} (persons working in registered industries per lakh population). Among them the first two are positively correlated whereas the last three are negatively correlated.

Table 5.4 reveals that the causal analysis of tertiary occupation of total scheduled caste population eighteen indicators is found to have significant relationship. Among them only two indicators X_5 (per capita net sown area), X_{15} (rural employment rate of scheduled caste population) are significant at 95 per cent level of confidence and they record negatively relationship. Rest of the sixteen indicators are found to have significant relationship at 99 per cent level of confidence. Among them three indicators X_3 (sex ratio of scheduled caste population), X_4 (per cent of scheduled caste population to the total population), X_{14} (total employment rate of scheduled caste population)

Table 5.5 Results of Correlation between Major Occupational Groups in Rural Scheduled Caste Population and Other Selected Indicators, Uttar Pradesh, 2001

Indicators	Primary Occupation (Y1)	Secondary Occupation (Y_2)	Tertiary Occupation (Y_3)
X_1	-0.269*	-0.021	0.014
X_2	-0.569**	0.424**	0.419**
X_3	0.214	-0.144	-0.327**
X_4	-0.234	-0.152	-0.210
X_5	0.544**	-0.270*	-0.330**
X_6	-0.202	-0.091	0.044
X_7	-0.172	0.110	0.367**
X_8	-0.573**	0.260*	0.440**
X_9	-0.103	0.040	0.228
X_{10}	-0.292*	0.205	0.546**
X_{11}	-0.260*	0.175	0.529**
X_{12}	-0.347**	0.511**	0.640**
X_{13}	-0.228	0.140	0.515**
X_{14}	0.588**	-0.241*	-0.393**
X_{15}	0.569**	-0.180	-0.322**
X_{16}	0.436**	-0.050	-0.154
X_{17}	-0.559**	0.420**	0.631**
X_{18}	0.320**	-0.300*	-0.299*
X_{19}	0.051	-0.042	-0.075
X_{20}	-0.342**	0.172	0.259*
X_{21}	-0.292*	0.183	-0.034
X_{22}	-0.291*	0.131	0.122
X_{23}	0.203	-0.047	-0.190
X_{24}	0.219	-0.235	-0.323**
X_{25}	-0.133	0.298*	0.180
X_{26}	0.144	-0.186	-0.201
X_{27}	-0.515**	0.440**	0.538**
X_{28}	-0.021	0.163	0.235*
X_{29}	-	-0.668**	-0.634**
X_{30}	-0.668**	-	0.630**
X_{31}	-0.634**	0.630**	-

****Significance at 1 Per cent Level**
*** Significance at 5 Per cent Level**

and X_{29} (primary employment rate of total scheduled caste population) yield negative relationship. Against them positively correlated indicators are X_2 (density of scheduled caste population), X_8 (net irrigated area), X_{10} (number

of working industrial units per lakh population), X_{11} (persons working in registered industries per lakh population), X_{12} (per cent of scheduled caste urban population), X_{13} (per capita income), X_{17} (literary rate of scheduled caste population), X_{20} (number of higher secondary schools per lakh population), X_{25} (number of beds per lakh population), X_{27} (length of metalled road per thousand square kilometers), X_{28} (number of electrified villages of total inhabited villages) and X_{30} (primary employment rate of total scheduled caste population).

Rural and Urban

The results of simple linear relationship of employment groups of rural population are almost similar to the results of employment groups of total population. It has been found that almost all the indicators are similar in the direction of relationship though in degrees they differ considerably. It will also be seen from the table 5.5, that like the total population, in rural population, too, the indicators which have direct relationship with the per cent of scheduled caste workers in primary occupation (Y_1) are inversely related to the per cent of workers in secondary occupation (Y_2) and tertiary occupation (Y_3). Table 5.6 shows that among the indicators used for urban population, the coefficient of nine indicators recorded a significant relationship with the per cent of urban scheduled caste workers in primary occupation (Y_1). In this group X_3 (sex ratio of scheduled caste population), X_{26} (number of primary health care centers per lakh population) are found to have direct relationship with (Y_1) and they are significant at 95 per cent level of confidence. Against them negatively correlated indicators are X_{27} (length of metalled road per thousand square kilometers) and X_{31} (tertiary employment rate of rural scheduled caste population). The other indicators showing significant relationship with urban secondary occupation group at 99 per cent level of confidence are X_8 (net irrigated area), X_9 (irrigation intensity), X_{20} (number of higher secondary schools per lakh population), X_{25} (number of beds per lakh population), X_{30} (secondary employment rate of rural scheduled caste

Table 5.6 Results of Correlation between Major Occupational Groups in Urban Scheduled Caste Population and Other Selected Indicators, Uttar Pradesh, 2001

Indicators	Primary Occupation (Y_1)	Secondary Occupation (Y_2)	Tertiary Occupation (Y_3)
X_1	-0.031	-0.012	-0.049
X_2	-0.213	0.152	-0.188
X_3	0.265*	0.048	-0.402**
X_4	-0.034	-0.212	-0.103
X_5	0.225	-0.007	-0.027
X_6	-0.015	-0.216	0.097
X_7	-0.032	-0.019	0.112
X_8	0.390**	-0.086	-0.160
X_9	-0.329**	-0.284*	0.032
X_{10}	0.110	0.216	0.123
X_{11}	-0.052	0.200	0.117
X_{12}	-0.103	0.397**	0.016
X_{13}	-0.063	0.159	0.132
X_{14}	-0.067	-0.026	0.177
X_{15}	-0.038	0.007	0.192
X_{16}	-0.032	0.155	0.015
X_{17}	0.143	0.162	-0.234
X_{18}	-0.177	-0.028	-0.169
X_{19}	-0.153	-0.044	-0.193
X_{20}	-0.429**	-0.002	-0.266*
X_{21}	-0.111	-0.137	0.010
X_{22}	0.195	-0.035	-0.164
X_{23}	0.138	0.036	-0.145
X_{24}	0.025	-0.198	-0.045
X_{25}	-0.458**	0.089	0.218
X_{26}	0.260*	-0.158	-0.281*
X_{27}	-0.274*	0.140	-0.043
X_{28}	0.058	-0.017	-0.057
X_{29}	-	-0.459**	-0.260*
X_{30}	-0.459**	-	-0.208
X_{31}	-0.260*	-0.208	-

****Significance at 1 Per cent Level**
*** Significance at 5 Per cent Level**

population) leaving the variable X_8, rest of the four indicators are negatively correlated. Only three indicators X_9 (irrigation intensity), X_{12} (per cent of scheduled caste urban population), X_{29} (primary employment rate of rural

scheduled caste population) are showing significant relationship with urban secondary employment (Y_2) in which X_9 is significant at 99 per cent level of confidence and having negative relationship. X_{12} is significant at 95 per cent level of confidence and having positive relationship and X_{29} is significant at 95 per cent level of confidence and bears negative relationship. For the urban tertiary employment group (Y_3), only four indicators bear significant relationship. They are X_3 (ratio of scheduled caste population to the total population), X_{20} (number of higher secondary schools per lakh population), X_{26} (number of primary health care centers per lakh population) and X_{29} (urban primary employment rate of scheduled caste population). Only X_3 is significant at 99 per cent level of confidence and yield negative relationship whereas rest of the above discussed three indicators (X_{20}, X_{26} and X_{29}) are significant at 95 per cent level of confidence and record inverse relationship.

Factor Analysis

Factor analysis reduces three sets of thirty one indicators (all the considered twenty eight independent indicators and a group of three dependent indicators) for total, rural and urban scheduled caste population of all the seventy districts of Uttar Pradesh. These dependent and independent indicators are taken together to see their impact on the study area. The results indicate (table no. 5.7) that 68.004 of the variance of total scheduled caste population may be explained by six factors. These factors account for 67.366 per cent and 68.232 per cent for the total variance in the rural and urban scheduled caste population respectively. The other factors are ignored here because their share is meager or in other words their factor loading is very low among the considered six factors. F_1 having the eigen value of 4.94.6 explains 22.428 per cent of the total variance. The indicators which have factor loading of more than 0.40 and possesses strong negative relationship are X_6 (cropping intensity), X_8 (net irrigation areas), X_{17} (literacy rate of scheduled caste population) and X_{27} (length of the metalled road per thousand square kilometers) whereas the positively loaded indicators with the factor loading more than 0.40 are X_5 (per capita net sown area), X_{14} (total

employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{29} (primary employment rate of total scheduled caste population) and X_{30} (secondary employment of total scheduled caste population). This factor can be identified as **'participation factor'**.

Factor F_2 with an eigen value of 4.022 explain 12.974 per cent of the total variance, its component negatively loaded indicators with the factor loading more than 0.40 are X_5 (per capita net sown area), X_{19} (number of senior basic schools per lakh population), whereas, the positively loaded indicators with the factor loading more than 0.40 are X_1 (growth rate of scheduled caste population), X_2 (density of scheduled caste population), X_4 (sex ratio of scheduled caste population), X_{21} (junior basic school's teacher student ratio) and X_{22} (senior basic school's teacher student ratio). The factor is identified as **'demographic cum educational'** factor.

Factor F_3 with an eigen value of 3.526 explains 11.373 per cent of the total variance and there are only three positively loaded indicators which exceeds the threshold value i.e., 0.40 and they are X_{10} (number of working industrial units per lakh population), X_{11} (number of persons working in registered industries per lakh population) and X_{13} (per capita income). This factor may be called as **'industrial development'** factor.

F_4 which explains 10.551 per cent of the total variance have an eigen value of 3.277. Its component negatively loaded indicator with the factor loading more than 0.40 is X_{29} (primary employment rate of scheduled caste population), whereas, the positively loaded indicators of the same factor with the threshold value of more than 0.40 are X_{17} (literacy rate of scheduled caste population) and X_{26} (number of primary health care centers per lakh population). This factor it recognized as **factor of social development**. Factor F_5 explains 10.241 of the total variance and have the eigen value of 3.175 the negatively loaded indicators exceeding from 0.40 in factor loading are X_6 (cropping intensity), X_8 (net irrigated area)and X_9 (irrigation intensity). However, the

Table 5.7 Rotated Factor Matrix :, Total Scheduled Caste Population, Uttar Pradesh, 2001

Indicators	F1	F2	F3	F4	F5	F6
X_1	-0.284	0.562	0.203	-0.098	0.151	0.07
X_2	-0.263	0.509	0.084	0.335	-0.334	0.432
X_3	0.255	0.067	-0.059	-0.27	0.347	0.603
X_4	0.009	0.785	-0.181	-0.113	0.193	0.19
X_5	0.429	-0.547	0.028	-0.124	0.568	-0.094
X_6	-0.442	0.27	-0.349	-0.221	-0.561	-0.045
X_7	-0.265	-0.248	-0.006	0.117	-0.242	-0.564
X_8	-0.701	0.142	0.017	0.003	-0.409	0.153
X_9	-0.34	0.079	-0.002	-0.278	-0.449	0.159
X_{10}	-0.1	-0.022	0.965	0.107	-0.074	0.012
X_{11}	-0.103	0.015	0.968	0.045	-0.047	-0.028
X_{12}	-0.195	-0.278	0.287	0.736	-0.157	0.106
X_{13}	-0.08	-0.046	0.972	0.006	-0.046	-0.097
X_{14}	0.902	0.117	-0.153	-0.15	0.152	0.05
X_{15}	0.91	0.071	-0.148	-0.03	0.155	0.074
X_{16}	0.794	-0.05	0.115	-0.136	-0.077	0.174
X_{17}	-0.519	-0.327	0.188	0.482	0.031	0.369
X_{18}	-0.069	-0.696	-0.212	-0.123	0.491	0.15
X_{19}	-0.13	-0.627	-0.185	0.163	0.334	0.478
X_{20}	-0.243	-0.125	0.01	0.238	-0.11	0.588
X_{21}	0.082	0.72	-0.081	0.047	-0.183	-0.061
X_{22}	-0.072	0.636	-0.141	0.008	0.014	-0.088
X_{23}	0.01	0.142	0.003	-0.132	0.204	-0.432
X_{24}	0.126	0.014	-0.178	0.007	0.796	0.134
X_{25}	0.064	-0.04	-0.123	0.756	-0.006	0.111
X_{26}	0.032	-0.026	-0.033	-0.154	0.751	-0.054
X_{27}	-0.402	0.044	0.207	0.386	-0.261	0.251
X_{28}	-0.121	-0.303	-0.178	0.304	0.065	0.096
X_{29}	0.597	-0.244	-0.232	-0.619	0.094	-0.18
X_{30}	0.631	-0.38	-0.203	-0.448	0.081	-0.156
X_{31}	0.149	-0.155	-0.072	-0.734	-0.042	0.167
Eigen Value	**4.946**	**4.022**	**3.526**	**3.271**	**3.175**	**2.142**
Per centage of Varience	**15.956**	**12.974**	**11.373**	**10.551**	**10.241**	**6.909**
Cumulative Per centage of Varience	**15.956**	**28.931**	**40.304**	**50.854**	**61.096**	**68.004**

positively loaded indicators with the factor loading of more than 0.40 are X_{18} (number of junior basic schools per lakh population), X_{24} (number of hospitals per lakh population) and X_{29} (total primary employment rate of scheduled caste population). This factor is identified as factor of **'infrastructural development'.**

F_6 with an eigen value of 2.142 explains 6.909 of the total variance and incorporate six indicators of factor loading of more than 0.40. Among them X_7 (net sown area to the total cropped area) is only negatively loaded whereas rest of the four indicators are positively loaded. They are X_2 (density of scheduled caste population), X_3 (per cent of scheduled caste population to the total population), X_{19} (number of senior basic schools per lakh population), and X_{20} (number of higher secondary schools per lakh population). This factor is identified as **'demographic cum educational'** factor.

Rural and Urban

Table no. 5.8 indicates that among the six factors obtained for the rural scheduled caste population factor F_1 having an eigen value of 4.418 explains as high as 14.252 per cent of the total variance. Its component positively loaded indicators with the factor loading of more than 0.40 are X_6 (cropping intensity), X_8 (net irrigated area), X_9 (irrigation intensity), X_{17} (literacy rate of scheduled caste population) and X_{27} (length of metalled road per thousand square kilometers). The negatively loaded indicators of the same factor are X_5 (per capita net sown area), X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population) and X_{16} (urban employment rate of scheduled caste population). This factor can be identified as **'infrastructure cum participation factor'**.

The factor F_2, having eigen value 4.359 is explaining 14.063 per cent of the total variance. The indicators with positive factor loading of more than 0.40 are X_1 (growth rate of scheduled caste population), X_2 (density of scheduled caste population), X_3 (sex ratio of scheduled caste people), X_6 (cropping

intensity), X_{21} (junior basic school's teacher student ratio) and X_{22} (senior basic school's teacher student ratio). The negatively loaded indicators are X_5 (per capita net sown area), X_{18} (junior basic school's teacher student ratio) and X_{19} (senior basic school's teacher student ratio). This factor can be denoted by **'demographic cum educational factor'**

Factor F_3, explains 13.343 per cent of the total variance. The eigen value of this factor is 4.136 and all the component indicators of this factor are positively loaded and these indicators are X_2 (density of scheduled caste population), X_{12} (per cent of scheduled caste urban population), X_{17} (literacy rate of scheduled caste population), X_{25} (number of beds per lakh population), X_{27} (length of metalled road per thousand square kilometers), X_{29} (rural primary employment rate of scheduled caste population), X_{30} (rural secondary employment rate of scheduled caste population) and X_{31} (rural tertiary employment rate of scheduled caste population). This factor is identified as **'employment'** factor.

Factor F_4 accounts for only 11.046 per cent of the total variance with the eigen value of 3.424. Its component indicators with the factor loading of more than 0.40 are only three and all of them are having very high factor loading these indicators against their factor loading (F.L) are X_{10} (number of working industrial units per lakh population F.L 0.962), X_{11} (number of persons working in registered industries per lakh population F.L 0.968) and X_{13} (per capita income F.L 0.975). The factor can be denoted by factor of **'economic development'**. Factor F_5 is explaining only 8.138 per cent of the total variance and the eigen value of this factor is 2.523. The indicators which give factor loading of more than 0.40 are X_3 (sex ratio of scheduled caste population), X_4 (per cent of scheduled caste population to the total population), X_7 (net cropped area to the total cultivated area), X_{24} (number of hospitals per lakh population) and X_{26} (number of primary health care centers

Table 5.8 Rotated Factor Matrix of Rural Scheduled Caste Population, Uttar Pradesh, 2001

Indicators	F1	F2	F3	F4	F5	F6
X_1	0.321	0.468	-0.033	0.228	0.343	-0.205
X_2	0.321	0.564	0.443	0.06	0.2	0.325
X_3	-0.277	-0.037	-0.069	-0.056	0.648	0.128
X_4	0.015	0.63	-0.238	-0.145	0.476	0.011
X_5	-0.51	-0.673	-0.129	0.01	0.148	-0.285
X_6	0.521	0.419	-0.254	-0.297	-0.303	0.256
X_7	0.202	-0.152	0.041	-0.03	-0.672	-0.174
X_8	0.7	0.229	0.096	0.032	-0.171	0.309
X_9	0.437	0.229	-0.148	0.019	-0.119	0.228
X_{10}	0.086	-0.015	0.148	0.962	-0.05	0.053
X_{11}	0.09	0.019	0.103	0.968	-0.042	-0.015
X_{12}	0.217	-0.222	0.761	0.227	-0.106	0.111
X_{13}	0.063	-0.042	0.054	0.975	-0.051	0.025
X_{14}	-0.878	0.101	-0.221	-0.164	0.184	-0.011
X_{15}	-0.876	0.055	-0.112	-0.17	0.195	-0.001
X_{16}	-0.813	0.031	-0.025	0.073	0.013	0.152
X_{17}	0.454	-0.38	0.516	0.158	0.109	0.314
X_{18}	-0.009	-0.83	-0.122	-0.195	0.219	-0.035
X_{19}	0.091	-0.747	0.134	-0.182	0.353	0.301
X_{20}	0.232	-0.151	0.219	0.012	0.237	0.597
X_{21}	-0.048	0.73	-0.018	-0.086	0.026	0.007
X_{22}	0.043	0.591	0.014	-0.151	0.08	-0.144
X_{23}	0.026	0.134	-0.031	-0.003	-0.032	-0.651
X_{24}	-0.117	-0.26	-0.068	-0.172	0.683	-0.381
X_{25}	0.064	-0.06	0.568	-0.158	0.153	0.059
X_{26}	-0.109	-0.26	-0.096	-0.052	0.442	-0.529
X_{27}	0.439	0.105	0.48	0.176	0.006	0.206
X_{28}	0.192	-0.289	0.384	-0.228	0.08	-0.148
X_{29}	0.042	0.099	0.924	0.145	-0.153	0.068
X_{30}	0.025	0.209	0.861	0.078	-0.165	0.057
X_{31}	-0.286	0.024	0.654	0.186	-0.17	-0.039
Eigen Value	**4.418**	**4.359**	**4.136**	**3.424**	**2.523**	**2.023**
Percentage of Variance	**14.252**	**14.063**	**13.343**	**11.046**	**8.138**	**6.526**
Cumulative Percentage of Variance	**14.252**	**28.315**	**41.658**	**52.705**	**60.842**	**60.842**

per lakh population) among them X_7 is only negatively loaded whereas rest of the four indicators are positively loaded. This factor can be identified as factor of **'cultural development'** factor. F_6 is explaining around 6.526 per cent of the total variance and having the eigen value of 2.023. There are only three indicators with the factor loading of more than 0.40 and among them X_{20} (number of higher secondary schools per lakh population) is positively loaded whereas X_{23} (higher secondary schools teacher student ratio) and X_{26} (number of primary health care centers per lakh population) are negatively loaded. This factor is identified as **'infra structure factor'.**

Table no. 5.9 explains that 69.040 per cent of the variances by six factors in urban scheduled caste population. Factor F_1 explains 13.421 per cent of total variance and having the eigen value 4.141. It includes six factors of the factor loading of more than 0.40. Out of which positively loaded indicators are X_6 (cropping intensity) and X_8 (net irrigated area) and negatively loaded indicators are X_5 (per capita net sown area), X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population) and X_{16} (urban employment rate of scheduled caste population). This factor may be called as **'factor of socio-cultural development'**.

Factor F_2, with an eigen value of 3.959, constitutes 12.727 per cent of the total variance. It includes five indicators of the urban population with the factor loading 0.40 and over, and all of them are positively loaded. They are X_{10} (number of working industrial units per lakh population), X_{11} (number of persons working in registered industrial units per lakh population), X_{13} (per capita income), X_{29} (urban secondary employment rate of scheduled caste population) and X_{30} (urban tertiary employment rate of scheduled caste population).This factor may be called as **'economic development'** factor.

Factor F_3, having an eigen value of 4.131, explains 13.326 per cent of the total variance. It incorporates eight indicators of the factor loading of more than 0.40. Out of which five indicators are positively loaded and they are

X_1 (growth rate of scheduled caste population), X_2 (density of scheduled caste population), X_4 (sex ratio of scheduled caste population), X_{21} (junior basic

school's teacher student ratio), X_{22} (senior basic school's teacher student ratio) whereas negatively loaded indicators are X_5 (per capita net sown area), X_{18} (number of junior basic schools per lakh population) and X_{19} (number of senior basic schools per lakh population). This factor may be called as **'education cum demographic'** factor.

Factor F_4 having an eigen value of 3.513, explains 11.331 per cent of the total variance. It incorporates seven indicators of the factor loading of more than 0.40 and all of them are positively loaded. They are X_{12} (per cent of scheduled caste urban population), X_{17} (literacy rate of scheduled caste population), X_{25} (number of beds per lakh population, X_{27} (length of the metalled road per thousands square kilometers), X_{28} (number of electrified villages to the total inhabited villages), X_{29} (urban primary employment rate of scheduled caste population) and X_{30} (urban secondary employment rate of scheduled caste population). This factor may be identified as **'employment cum infrastructural factor'**.

Factor F_5 with an eigen value of 3.048 explains 9.832 per cent of the variance and incorporate five indicators of factor loading of more than 0.40. Out of which, two indicators are positively loaded and they are X_{24} (number of hospitals per lakh population) and X_{26} (number of primary health care centers per lakh population), whereas, the negatively loaded factors are X_6 (cropping intensity), X_7 (net cropped area to the total cultivated area) and X_{31} (tertiary employment rate of scheduled caste population).This factor may be called as **'medical and agricultural factor'**

Factor F_6 with an eigen value of 2.340 explains 7.550 per cent of the total variance. There are only five indicators with the factor loading of more than0.40 and they are X_{17} (literacy rate of scheduled caste population), X_{19} (number of senior basic schools per lakh population), X_{20} (number of higher secondary schools per lakh population), X_{23} (higher secondary school's teacher student ratio) and X_{31} (urban tertiary employment rate of scheduled

Table 5.9 Rotated Factor Matrix of Urban Scheduled Caste Population, Uttar Pradesh, 2001

Indicators	F_1	F_2	F_3	F_4	F_5	F_6
X_1	0.302	0.529	0.209	-0.031	0.312	-0.134
X_2	0.237	0.66	0.104	0.382	-0.026	0.362
X_3	-0.243	0.073	-0.084	-0.181	0.61	0.343
X_4	-0.035	0.7	-0.17	-0.222	0.308	0.056
X_5	-0.45	-0.685	0.007	-0.137	0.356	-0.119
X_6	0.496	0.388	-0.332	-0.142	-0.451	0.017
X_7	0.235	-0.278	0.033	0.029	-0.534	-0.19
X_8	0.667	0.249	0.051	0.085	-0.301	0.286
X_9	0.378	0.241	0.004	-0.005	-0.25	0.06
X_{10}	0.057	-0.009	0.965	0.093	-0.068	0.019
X_{11}	0.073	0.017	0.971	0.048	-0.037	-0.04
X_{12}	0.134	-0.159	0.308	0.807	-0.137	0.158
X_{13}	0.043	-0.046	0.972	0.009	-0.053	-0.011
X_{14}	-0.899	0.081	-0.183	-0.196	0.127	-0.09
X_{15}	-0.918	0.051	-0.175	-0.058	0.128	-0.073
X_{16}	-0.815	0.001	0.078	-0.124	-0.034	0.125
X_{17}	0.395	-0.277	0.231	0.498	0.026	0.506
X_{18}	0.048	-0.781	-0.222	-0.086	0.362	0.153
X_{19}	0.063	-0.626	-0.192	0.202	0.318	0.454
X_{20}	0.143	-0.029	0.024	0.222	0.009	0.684
X_{21}	-0.077	0.706	-0.075	-0.09	-0.095	-0.07
X_{22}	0.043	0.58	-0.096	-0.083	0.036	-0.024
X_{23}	0.113	0.072	-0.007	-0.026	0.212	-0.655
X_{24}	-0.16	-0.143	-0.182	0.104	0.75	-0.179
X_{25}	-0.085	0.041	-0.129	0.797	0.031	-0.026
X_{26}	-0.072	-0.212	-0.024	-0.09	0.649	-0.183
X_{27}	0.369	0.173	0.223	0.48	-0.105	0.224
X_{28}	0.11	-0.209	-0.181	0.587	0.13	-0.065
X_{29}	0.15	-0.024	0.455	0.783	-0.282	0.144
X_{30}	0.227	0.079	0.524	0.524	-0.329	0.22
X_{31}	-0.231	-0.021	0.056	0.195	-0.404	-0.548
Eigen Value	**4.161**	**4.131**	**3.959**	**3.513**	**3.048**	**2.34**
Percentage of Variance	**13.421**	**13.326**	**12.772**	**11.331**	**9.832**	**7.55**
Cumulative Per centage of Variance	**13.421**	**26.748**	**39.52**	**50.851**	**60.683**	**68.232**

caste population). Among these five indicators, the above three are positively loaded whereas the lower two are negatively loaded. This factor may be identified as **'educational factor'**.

Employment Regions

For the identification and demarcation of employment regions of scheduled castes in Uttar Pradesh, location quotient has been used. It has already been explained in the methodology that location quotient is a measure of specialization which provides an index of surplus or deficit in each employment group with reference to state average as the norm. If for a district, the quotient exceeds 1.00, it means that the district has more than its share of the employment group, whereas a quotient value less than 1.00 shows less than its share. The quotient can never be less than zero, i.e. negative.[1]

Quotient equal to 1.00 signifies that the district for which it is obtained has its normal share. Thus the categories of more than 1.00 and less than 1.00 are taken that the employment region concentrated, is over presented and underrepresented respectively. [2]

In the present study location quotient has been calculated for the employment rate of total, rural and urban scheduled caste populations. For showing the regional distribution of workforce of all the three population groups, the whole range of index number is arranged into five broad categories.

TOTAL SCHEDULED CASTE EMPLOYMENT REGIONS

While dealing with the location quotient of total scheduled caste population, the five categories are as follows: Very High (above 1.159), High (1.084 to1.159), Medium (1.009 to1.083), Low (0.924 to 1.00 8) and Very Low (below 0.924). It is clear from the fig. 5.10 that around twenty per cent of the districts of Uttar Pradesh lie in the category of very high of level of employment region, out of which nine districts are forming two compact belts of four eastern districts (Shrawasti, Balrampur, Siddarthnagar and Maharajganj) and five

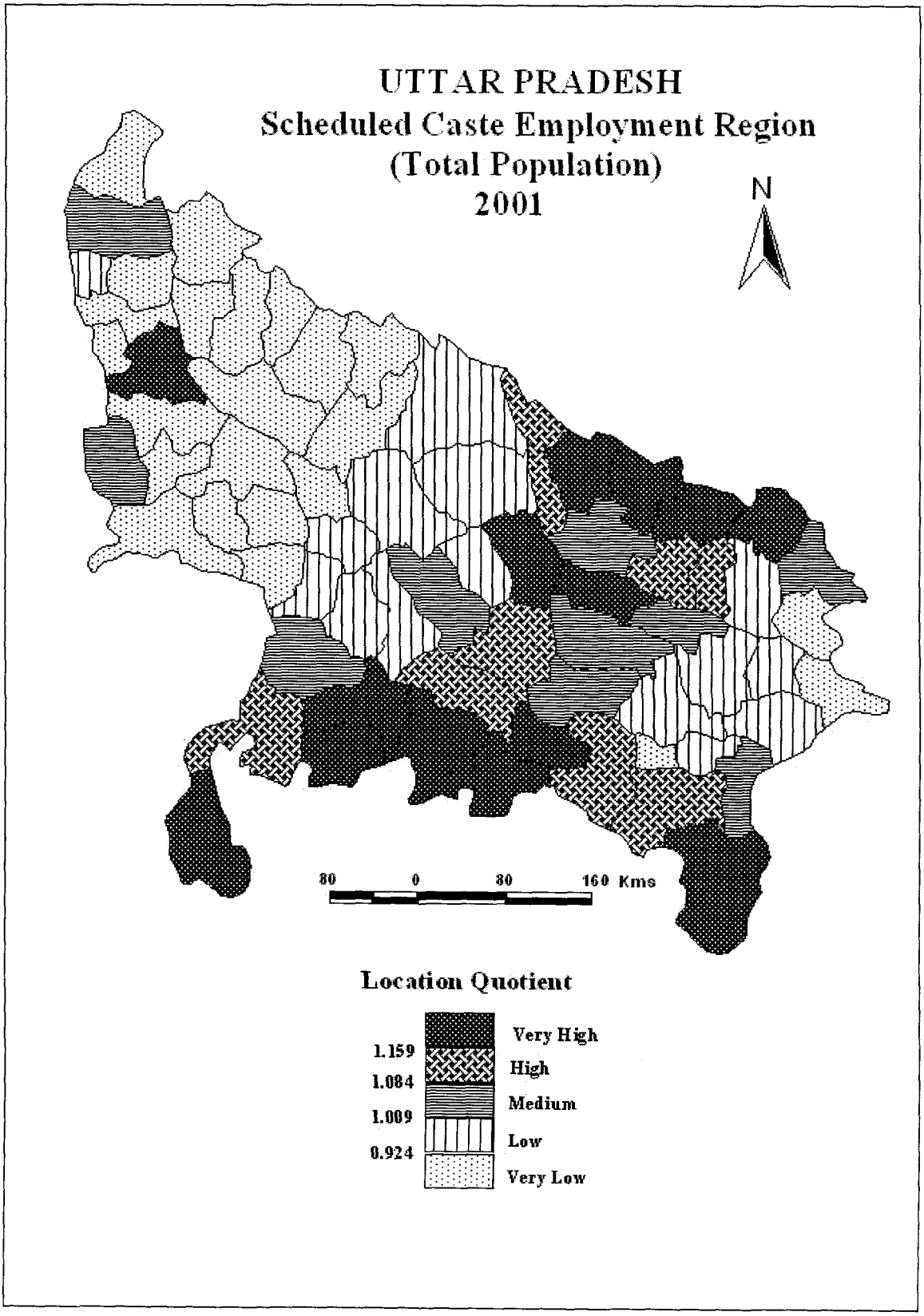
UTTAR PRADESH
Scheduled Caste Employment Region
(Total Population)
2001
N
80 0 80 160 Kms
Location Quotient
1.159
1.084
1.009
0.924
Very High
High
Medium
Low
Very Low

Fig. 5.10

Table 5.10 District wise Distribution of Employment Force, Uttar Pradesh, 2001

District	Total	Rural	Urban
Saharanpur	0.85	0.83	0.99
Muzaffarnagar	1.01	1.01	1.08
Bijnor	0.83	0.82	0.93
Moradabad	0.92	0.93	0.94
Rampur	0.81	0.79	0.96
Jyotiba Phule Nagar	0.89	0.89	0.95
Meerut	0.88	0.95	0.94
Baghpat	0.95	0.94	1.01
Ghaziabad	0.82	0.88	0.96
Gautam Budha Nagar	0.83	0.80	1.07
Bulandshahr	1.20	1.22	1.12
Aligarh	0.89	0.90	0.97
Hathras	0.85	0.83	1.03
Mathura	1.06	1.09	1.02
Agra	0.78	0.79	0.94
Firozabad	0.80	0.77	1.04
Etah	0.82	0.81	0.94
Mainpuri	0.79	0.78	0.84
Budaun	0.86	0.85	0.99
Bareilly	0.88	0.88	0.95
Pilibhit	0.82	0.80	0.93
Shahjahanpur	0.85	0.84	0.95
Kheri	0.93	0.91	1.03
Sitapur	0.93	0.91	1.01
Hardoi	0.97	0.95	1.03
Unnao	1.05	1.03	1.02
Lucknow	0.94	0.97	1.02
Rae Bareilly	1.13	1.11	1.01
Farrukhabad	0.84	0.83	0.97
Kannauj	0.95	0.94	1.06
Etawah	0.80	0.79	0.90
Auraiya	0.98	0.97	0.94
Kanpur Dehat	0.98	0.96	0.99
Kanpur Nagar	0.93	1.01	1.03
Jalaun	1.08	1.11	1.04
Jhansi	1.11	1.19	1.10
Lalitpur	1.31	1.30	1.17
Hamirpur	1.17	1.18	1.14
Mahoba	1.26	1.29	1.17
Banda	1.24	1.26	1.10
Chitrakoot	1.28	1.27	1.09

Table 5.10 (Continued)

Fatehpur	1.14	1.13	1.03
Pratapgarh	1.06	1.04	0.98
Kaushambi	1.20	1.17	1.29
Allahabad	1.09	1.10	1.01
Barabanki	1.18	1.15	1.19
Faizabad	1.27	1.25	1.12
Ambedkarnagar	1.05	1.02	1.07
Sultanpur	1.07	1.05	1.03
Bahraich	1.10	1.08	1.00
Shrawasti	1.29	1.26	1.19
Balrampur	1.37	1.34	1.12
Gonda	1.07	1.05	1.00
Siddharthnagar	1.20	1.17	1.04
Basti	1.10	1.08	1.01
San Kabirnagar	1.10	1.08	1.11
Maharajganj	1.19	1.17	1.08
Gorakhpur	0.95	0.95	0.90
Kushinagar	1.07	1.04	1.00
Deoria	0.91	0.89	0.89
Azamgarh	0.96	0.94	0.94
Mau	0.97	0.95	1.08
Ballia	0.89	0.87	0.99
Jaunpur	0.98	0.96	0.94
Ghazipur	0.98	0.96	0.93
Chandauli	1.03	1.03	0.91
Varanasi	0.95	0.97	1.03
SRN	0.91	0.89	0.99
Mirzapur	1.11	1.09	1.09
Sonbhadra	1.18	1.17	0.93

Source: Census of India, 2001

southern districts (Hamirpur, Mahoba, Banda, Fatehpur, Chitrakoot and Kaushambi). Rest of the component districts is not forming any identifiable region.

Next on the record, it has been found that twelve per cent of the districts lie in the category of high level of employment force. These districts are found generally in the vicinity of the regions of very high level of employment force. The districts are namely Basti, Sant Kabir Nagar, Rai Bareilly,

Fatehpur, Allahabad, Mirzapur, Bahraich and Jhansi. Medium level of employment force is found only in fourteen per cent districts of the state. Three of them namely, Siddharthnagar, Sultanpur and Pratapgarh are grouped together and rest of the seven districts Muzaffarnagar, Mathura, Jalaun, Unnao, Gonda, Kushinagar and Chandauli are widely spaced. Twenty one per cent of the districts contribute to the region of low level of employment force in which leaving Baghpat, all the districts are distributed in the form of two compact pockets, one in central Uttar Pradesh and the other in eastern Uttar Pradesh; districts Kheri, Sitapur, Lucknow, Hardoi, Kannauj and Auriyya constitute the central pocket, wheras, eastern pocket is formed by the districts Gorakhpur, Mau, Azamgarh, Ballia, Jaunpur and Varanasi. Fifth category i.e., low level of employment force is found in most of the districts of western Uttar Pradesh here they constitute a distinct, large and continuous region of nineteen western districts. Only three districts Deoria, Ballia and Sant Ravidas Nagar of this group are found in the eastern part of the state.

Rural Scheduled Caste Employment Regions

While studying the rural scheduled caste employment force, it is observed that the regional diversification of rural employment force is almost similar to that of total employment force and the districts contributing to these five different groups in rural scheduled caste population are almost same to that of total population. The districts in the category of very high (above1.154) and high (1.079 to 1.154) level of rural scheduled caste force are same as that of the total employment force, the only difference between them is that in case of total employment force Barabanki lies in the category of very high level of employment force and Jhansi lies in the group of high level of employment force whereas the reciprocal of this, is observed in case of rural scheduled caste employment force. Both the categories in association account for twenty eight per cent of the total districts of the state. Thus it can be safely said that very high and high level of employment force is observed mostly in the southern and eastern districts of the state, whereas, in the western part of the

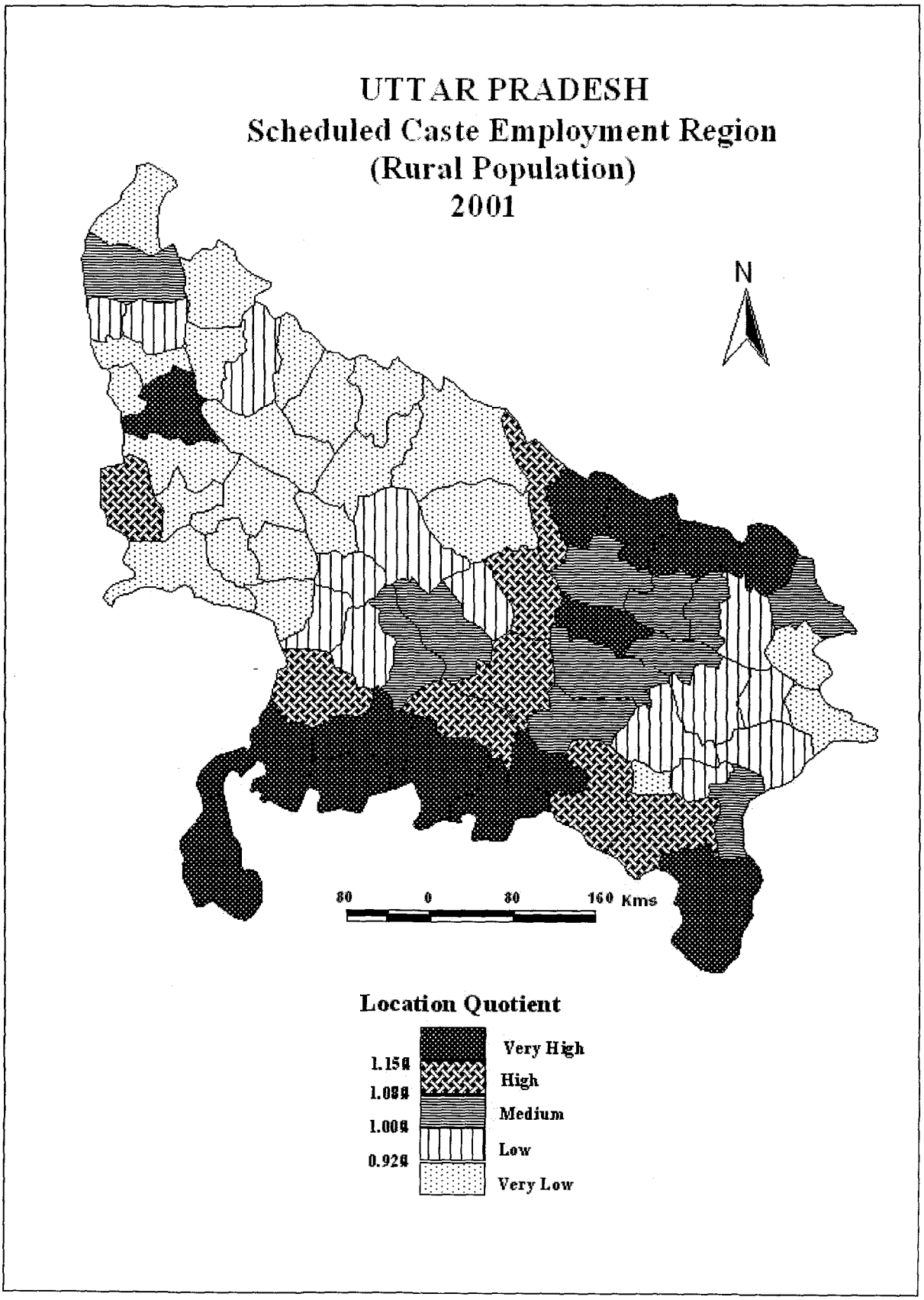
UTTAR PRADESH
Scheduled Caste Employment Region
(Rural Population)
2001
N
80
0
80
160 Kms
Location Quotient
Very High
High
Medium
Low
Very Low

Fig. 5.11

state only one or two districts of this kind are observed. The category of medium level of scheduled caste employment force is observed in sixteen per cent districts of the state. All of these districts are confined in the eastern Uttar Pradesh with an exception of Muzzafarnagar in the west. Six districts Gonda, Basti, Sant Kabir Nagar, Siddarthnagar, Sultanpur and Pratapgarh are arranged in the form of a group. Low level of rural scheduled caste employment force with a location qotient of (0.929-1.003) is observed in twenty per cent districts of the state. Most of the districts are arranged in two eastern and central pockets. The districts of eastern pocket are Gorakhpur, Azamgarh, Mau, Jaunpur, Varanasi and Ghazipur. The districts of western pocket are Lucknow, Hardoi, Kannauj, Auriyya and Kanpur Dehat.

A large continuous region of very low index value (below 0.929) stretches from west to central part of the state. Only three districts of this group are found in eastern part of the state. This category of rural scheduled caste employment force occupies thirty three per cent districts of the state.

Urban Scheduled Caste Employment Regions

Contrary to the location quotients of previous two employment forces, the location quotients of urban employment force has a narrow range of variations, however, five distinct regions are easily identifiable as shown in the fig 5.12. The region of very high level of urban workforce covers around seventeen per cent of the districts. Most of them are confined in the southern Uttar Pradesh or eastern Uttar Pradesh. The southern districts are Lalitpur, Jhansi, Hamirpur, Mohaba, Banda and Kaushambi. The eastern districts are Shrawasti, Balrampur, Barabanki, Faizabad and Sant Kabir Nagar.

In the category of high level of urban employment force only ten per cent districts of the state fall and they are far apart from each other. These widely scattered districts are Muzzafar Nagar, Gautam Budha Nagar, Maharajganj, Sant Kabir Nagar, Mau, Mirzapur and Chitrakoot. Medium level of urban

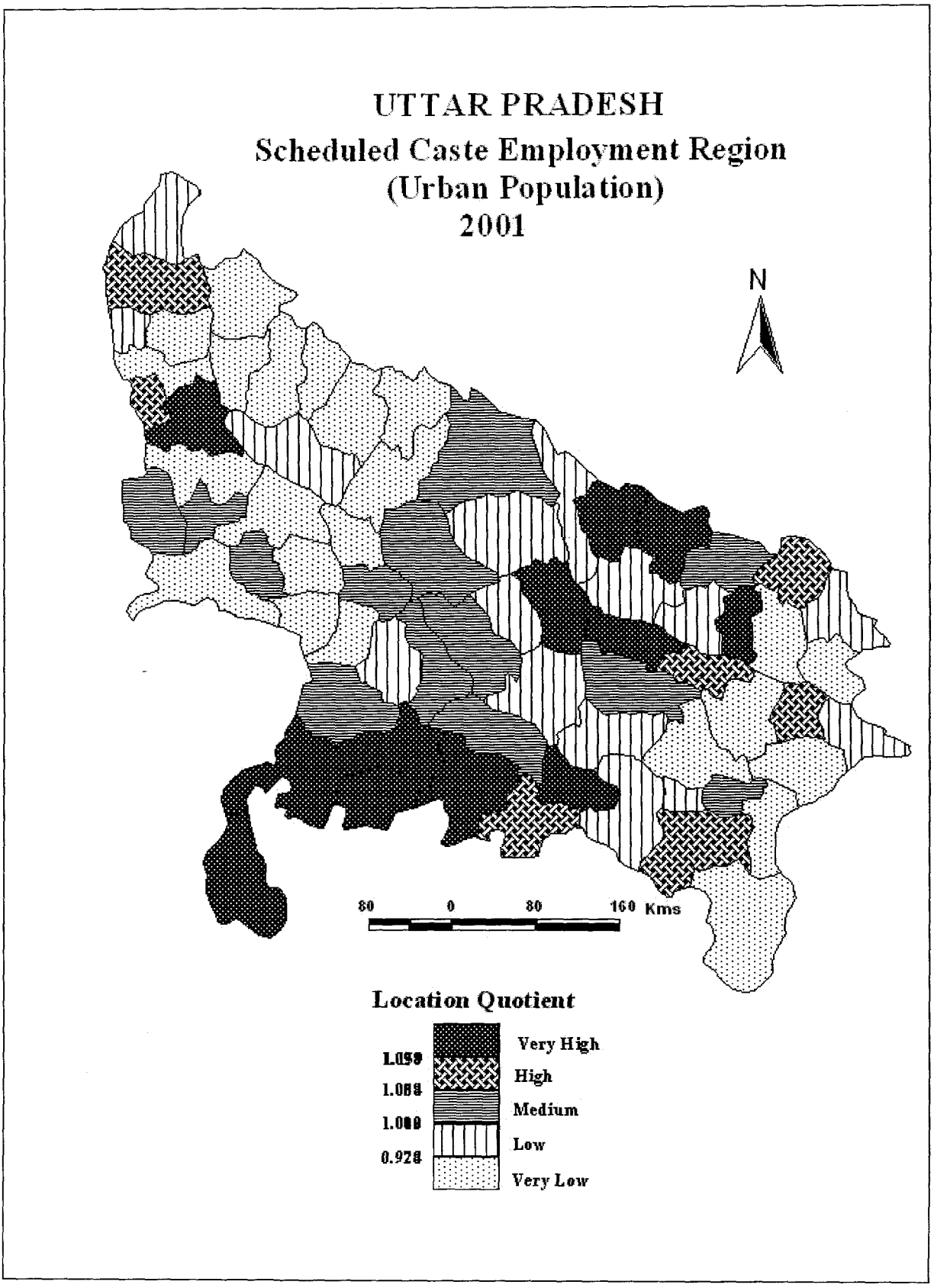
UTTAR PRADESH
Scheduled Caste Employment Region
(Urban Population)
2001
N
80 0 80 160 Kms
Location Quotient
1.059
1.068
1.069
0.928
Very High
High
Medium
Low
Very Low

Fig. 5.12

employment force is found in one fifth districts of the state. Six districts among them are arranged in the form of a belt. These districts are Kheri, Hardoi, Kannauj, Kanpur Nagar, Unnao and Faizabad. The other scattered districts of this group are Mathura, Hathras, Firozabad, Siddharthnagar, Sultanpur and Varanasi. Low level of urban employment force is mostly confined to the eastern part of the state. Here it forms as distinct region whereas very low level of urban employment force is mostly confined to the western part of the state.

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CHAPTER 6

SCHEDULED CASTE EMPLOYMENT AND SOCIO-ECONOMIC DEVELOPMENT

The preceding chapters dealt with the conceptual frame work, methodology and review of literature, the study area, general trends and patterns of scheduled caste employment and employment and structure along with the employment regions of scheduled caste. In this chapter, the levels of development of scheduled caste and the regions of the combination of employment and levels of development will be studied.

Development is a continuously changing and dynamic process. The meaning of development is perceived differently by different persons at different points of times. Uphoff and Ilchman (1972), pointed out that development was probably one of the most depreciated terms in social science literature, having been used more than it has been understood.[1] Development is a value positive concept because development is not only a change, but a change for betterment.[2] According to Colm and Geiger (1962), development means change along with growth.[3] Michel Todaro (1977), described development as a multi dimensional process involving changes in structure, attitude and institution as well as the acceleration of economic growth, the reduction of inequality and the eradication of absolute poverty.[4] In regional context, development is a process of improving the well being of the people. It is raising the standard of living of the people, improving their education and health, and also opening out to them new and equal opportunities for a richer and more varied life. For the present study development is studied under the three broader sub headings.

Economic Development of Scheduled Caste Population

Till the middle of this century the term economic development was used as a synonym for economic growth in the economic literature. Kindle Berger and Bruce Herric (1992), states that economic development included improvements in material welfare, especially for persons with the lowest incomes, the eradication of mass poverty and with its correlate of illiteracy, diseases and early death, change in economic composition of inputs and outputs that generally include shifts in the underlying structure of production away from agriculture towards industrial activities, the organization of economy in such a way that productive employment is generally among the working age population rather than the situation of privileged minority, and groups in working decisions about the directions, economic and otherwise, in which they should move to improve their welfare. Kinder Berger rightly observed that economic development implied changes in technology and institutional organization of production as well as distributive patterns of income.[5] The world development report (1991) defines economic development as a sustainable increase in living standards that encompasses material consumption, education, health, and environment protection.[6]The main purpose of economic development is to provide all the facilities ensuring normally accepted standard of living for all the sections of the society including the scheduled caste people. Though distribution of economic capital is not uniform in nature and magnitude for every section of the society yet the accelerated regional economic development demands the active participation of each and every inhabitant. The intensity of economic activity, the level of knowledge and amount of available capital are not only the accepted proximate cases of economic growth, but they may also be used to serve as indicators of economic development. In this part of the chapter, an attempt is made to give an overall assessment of the level of scheduled caste economic development and its regional distribution by combining twelve different variable of economic development. These variables are per capita net

sown area (X_5), cropping intensity (X_6), net sown area to the total cultivated area (X_7), net irrigated area (X_8), irrigation intensity (X_9), number of working industrial units per lakh population (X_{10}), people working in registered industrial units per lakh population (X_{11}), percentage of scheduled caste urban population (X_{12}), per capita income (X_{13}), scheduled caste total employment rate (X_{14}), scheduled caste rural employment rate (X_{15}), scheduled caste urban employment rate (X_{16}). These variables individually do not show very distinct patterns of regional economic development and the aggregate index of economic development is calculated by giving proper weightage to each index to obtain composite index. All the data have been arranged in descending order and standardized to zero mean for interpretation. The positive value relating to districts score show high level of development and negative values show low level of development. In the present study economic development has been considered to be the function of twelve variables which have been grouped into five categories the composite index of economic development and they are given below in the table no. 6.1.

Table 6.1 Levels of Scheduled Caste Economic Development, Uttar Pradesh, 2001

Category	Average Z score	No. of districts	%of total districts
Very high	Above 0.348	10	14
High	0.164 to 0.348	10	14
Medium	-0.164 to 0.164	28	40
Low	-0.348 to -0.164	13	19
Very low	Below 0.348	9	13
Total	-	70	100

The general picture that emerges from the regional distribution of these variables is that the distribution pattern of the levels of economic development of scheduled caste is uneven all over the state and it presents a

very complex picture as shown in the fig.6.1. The top most category i.e., very high level of economic development is exhibited by fourteen percent districts of the state. Leaving three isolated districts Balrampur, Mathura and Lalitpur, all the other seven districts form three very tiny pockets. One pocket is composed of three western districts namely, Ghaziabad, Gautam Budha Nagar and Bulandshahar. The other pocket is constituted by two eastern districts of Barabanki and Faizabad whereas of third pocket is comprised of the southern districts Mahoba and Banda. The very high levels of economic development of scheduled caste is the result of high positive scores of industrial development, agricultural development, per capita income, rural employment rate of scheduled caste population .

The regions of high economic development of scheduled caste people lie adjacent to the regions of very high level of economic development of these people. This category is also claimed by only fourteen percent districts of the state. These districts don't form any large identifiable region except three very tiny pockets and four widely spaced districts. The widely spaced districts are Sharawasti, Maharajganj, Ambedkar Nagar in the east and Moradabad in the west. The first tiny pocket is formed by the western districts such as Muzzafar Nagar and Meerut, Second is composed of the south western districts namely, Jhansi and Hamirpur whereas the third is formed by the south eastern districts of Kaushambi and Allahabad.

Medium level of economic development of scheduled caste people is identified in forty percent districts of the state which are distributed in the form of five identifiable regions with five isolated districts. One region of this grade runs from west to east including the districts of Rampur, Bareilly, Pilibhit, Shahjahanpur, Kheri and Bahraich. The other big pocket of this grade runs from the southern to central part including the districts of Chitrakoot, Fatehpur, Rae Bareilly, Lucknow, Unnao, Kanpur Nagar, Kannauj Auriya and

Table 6.2 District wise Levels of Economic, Social and Socio-Economic Development, Uttar Pradesh, 2001

District	Economic Development	Social Development	Socio-Economic Development
Saharanpur	-0.111	-0.079	-0.190
Muzaffarnagar	0.331	-0.395	-0.063
Bijnor	-0.408	-0.171	-0.579
Moradabad	0.190	-0.373	-0.183
Rampur	0.071	-0.340	-0.270
Jyotiba Phule Nagar	-0.063	-0.162	-0.226
Meerut	0.294	0.301	0.595
Baghpat	0.147	-0.527	-0.380
Ghaziabad	0.480	0.507	0.987
Gautam Buddha Nagar	1.554	-0.383	1.171
Bulandshahar	0.896	0.037	0.933
Aligarh	0.041	-0.054	-0.013
Hathras	-0.134	-0.036	-0.170
Mathura	0.393	0.220	0.613
Agra	-0.346	0.201	-0.145
Firozabad	-0.252	-0.169	-0.421
Etah	-0.388	-0.209	-0.597
Mainpuri	-0.525	-0.017	-0.542
Budaun	-0.198	-0.505	-0.703
Bareilly	0.030	-0.177	-0.147
Pilibhit	-0.148	-0.211	-0.359
Shahjahanpur	-0.091	-0.151	-0.242
Kheri	-0.098	-0.131	-0.229
Sitapur	-0.248	-0.123	-0.371
Hardoi	-0.203	0.126	-0.077
Unnao	-0.089	-0.066	-0.154
Lucknow	-0.137	0.311	0.174
Rae Bareli	-0.031	0.207	0.176
Farrukhabad	-0.488	0.034	-0.453
Kannauj	-0.103	-0.071	-0.174
Etawah	-0.533	0.512	-0.021
Auraiya	-0.131	0.230	0.099
Kanpur Dehat	-0.202	-0.071	-0.272
Kanpur Nagar	0.128	0.163	0.291
Jalaun	-0.036	0.383	0.346
Jhansi	0.291	0.275	0.566
Lalitpur	0.355	0.233	0.588
Hamirpur	0.213	-0.013	0.201
Mahoba	0.495	-0.176	0.319
Banda	0.358	-0.082	0.276

Table 6.2 (Continued)

Chitrakoot	0.076	0.234	0.310
Fatehpur	0.051	-0.002	0.049
Pratapgarh	-0.277	0.185	-0.092
Kaushambi	0.255	0.395	0.650
Allahabad	0.200	0.028	0.228
Barabanki	0.355	-0.047	0.308
Faizabad	0.479	-0.133	0.346
Ambedkar Nagar	0.170	-0.148	0.023
Sultanpur	-0.169	0.120	-0.049
Bahraich	-0.145	-0.182	-0.328
Shravasti	0.338	-1.137	-0.799
Balrampur	0.464	-0.862	-0.399
Gonda	-0.201	-0.393	-0.594
Siddharthnagar	-0.044	-0.329	-0.374
Basti	-0.114	-0.088	-0.202
Sant Kabir Nagar	-0.002	-0.365	-0.367
Maharajganj	0.323	-0.050	0.273
Gorakhpur	-0.401	0.326	-0.074
Kushinagar	-0.038	-0.042	-0.080
Deoria	-0.502	0.617	0.115
Azamgarh	-0.289	0.363	0.074
Mau	-0.115	0.639	0.524
Ballia	-0.403	0.555	0.152
Jaunpur	-0.341	0.234	-0.107
Ghazipur	-0.168	0.353	0.184
Chandauli	0.085	-0.035	0.050
Varanasi	-0.190	0.321	0.131
Sant Ravidas Nagar	-0.512	-0.024	-0.536
Mirzapur	-0.085	0.213	0.128
Sonbhadra	-0.067	0.224	0.156

and Jalaun. The third smaller region is comprised of the southern districts Sonbhadra, Mirzapur and Chandauli. The forth smaller region is constituted by the eastern districts Siddharthnagar, Basti and Sant Kabir Nagar and the fifth tiny region is formed by the districts Aligarh and Hathras.

Low level of economic development is observed in ninteen percent districts of the state. Among them six eastern districts Varanasi, Ghazipur, Azamgarh, Jaunpur, Pratapgarh and Sultanpur form a compact pocket. The other two

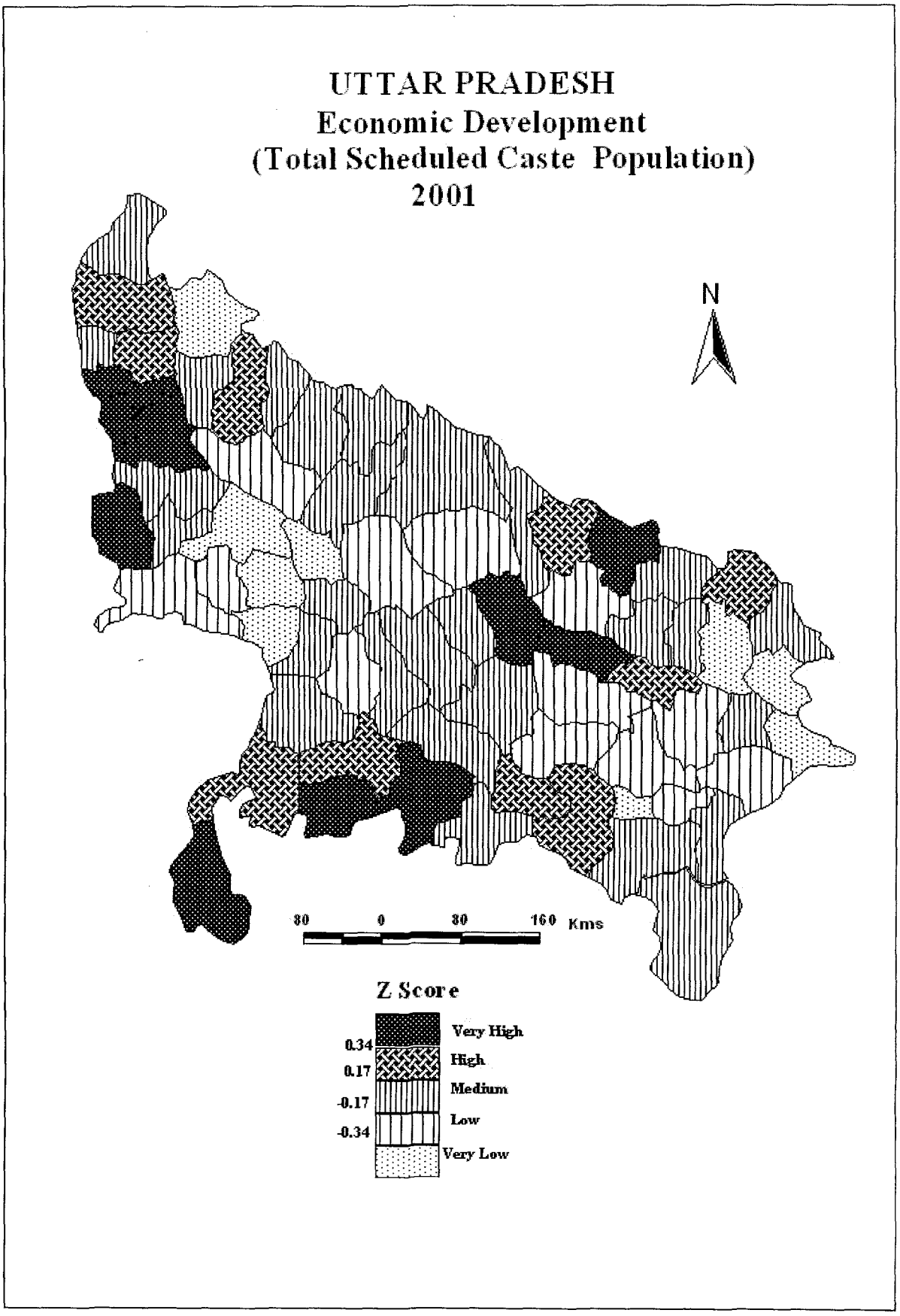
UTTAR PRADESH
Economic Development
(Total Scheduled Caste Population)
2001
N
80
0
80
160 Kms
Z Score
0.34
0.17
-0.17
-0.34
Very High
High
Medium
Low
Very Low

Fig. 6.1

tiny pockets are formed by the eastern districts (Sitapur and Hardoi) and western districts (Agra and Firozabad). The recognizable regions of very low level of scheduled caste economic development are distributed in eastern and western parts of the state. The eastern pocket is comprised of the districts of Gorakhpur, Deoria and Ballia whereas the western pocket is formed by the districts Etah, Farrukhabad, Mainpuri and Etawah. All the patches of low or very low economic development record either negative or the very low positive scores of almost all the twelve selected economic variables

Social Development of Scheduled Caste Population

Social development is a broad concept which is quite close to economic development. In the process of modernization, both economic and social development has to go hand in hand in a developed country. According to Unnithan (1976), 'social development may be seen as a process of ushering in a new order of existence. In quality of life and the quality of social relations which exist would indicate the level of the order of existence'.[7] In brief social development has come to mean bringing about improvement in the social well being of the people. Social development lays stress on provision of health services, education, housing, cultural amenities protection of children, a change in the status of women, regulation of labour and improved status for workers and reduction of disease poverty and other social ills. In the present study the researcher has assessed the level of social development of scheduled caste with the help of sixteen indicators. They are; growth rate of scheduled caste population (X_1), density of scheduled caste population (X_2) percentage of scheduled caste population to the total population (X_3), sex ratio of scheduled caste population (X_4), literacy rate of scheduled caste population (X_{17}), number of junior basics schools per lakh population (X_{18}), number of senior basic schools per lakh population (X_{19}), number of higher secondary schools per lakh population (X_{20}), junior basic school's teacher student ratio (X_{21}), senior basic school's teacher student ratio (X_{22}), higher secondary school's teacher student ratio (X_{23}), number of hospitals per lakh population

(X_{24}), number of beds per lakh population (X_{25}), number of primary health care centers per lakh population (X_{26}), length of the metalled road per thousand square kilometers (X_{27}) and percentage of electrified villages to the total inhabited villages (X_{28}). A composite index of each district has been marked out on the basis of z scores of variables calculated separately by districts. The scores of social development are marked with notable variations in its distribution among the districts of Uttar Pradesh and shown in the fig 6.2. The scores vary from 0.51 in Etawah to -0.51 in Baghpat. The districts may be conveniently arranged into five categories of z scores of Very High (above 0.32) High (0.16 to 0.32), Medium (-0.16 to 0.16), Low (-0.32 to -0.16),Very Low (Less than -0.32) level of social development.

A compact belt of very high level of scheduled caste social development is found in eastern part of the state. The component districts of this pocket are Gorakhpur, Deoria, Azamgarh, Mau, Ballia, Ghazipur and Varanasi. Rest of the four districts of this group fail to form any distinct region.. One-fifth districts of the state fall in the category of high level of social development of scheduled caste population. Apart from few scattered districts the other districts of this grade are distributed in the form of three tiny pockets and one small belt. The districts of one pocket are Mathura and Agra, the second pocket is formed by the districts of Jalaun and Jhansi; and the districts of third pocket are Mirzapur and Sonbhadra. Apart from it the belt of same grade is constituted by the districts of Lucknow, Rai Bareilly, Pratapgarh and Jaunpur.

Thirty seven percent districts of the state fall in the category of medium level of social development. Except one smaller pocket of three western districts of Bulandshahar, Aligarh and Hathras, majority of the districts of this grade form a discontinuous patch of seventeen districts, running from west to east and then turns to south. The category of low level of scheduled caste social

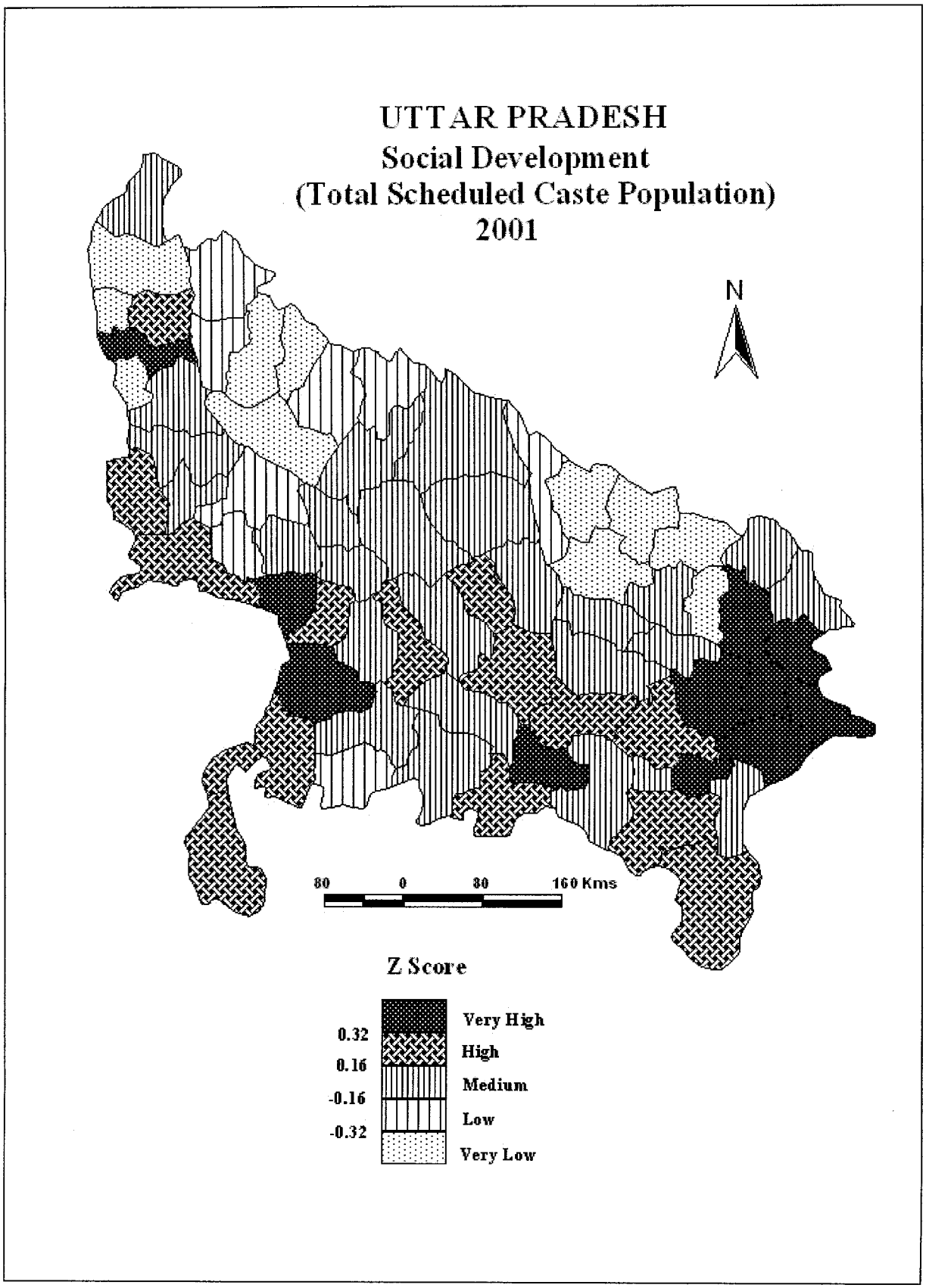
UTTAR PRADESH
Social Development
(Total Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Z Score
0.32
0.16
-0.16
-0.32
Very High
High
Medium
Low
Very Low

Fig. 6.2

development is identified in only eight districts. Majority of these districts are confined in the western part of the state in the form of three very small pockets. The districts Bijnor and Jyotiba Phule Nagar form one pocket, Etah and Firozabad constitute the second pocket and Bareilly and Pilibhit form the third pocket. However, Bahraich in the east and Hamirpur in the South are widely spaced districts. The three identifiable regions of the category of very low level of scheduled caste social development are as follows. The districts of western most pocket are Muzaffarnagar and Baghpat, Second pocket is comprised of the districts Moradabad, Rampur and Badaun, whereas, the districts of third pocket are Shrawasti, Gonda, Balrampur, Sidharathnagar and Sant Kabir Nagar.

Socio-Economic Development of Scheduled Caste Population

The foregoing analysis clearly indicates that there is a lot of variation in the level of development of scheduled caste in different sectors among the various districts of the state. These are districts which are very much developed with respect to certain sectors such as agriculture and industry but less developed in other sectors (visualized from the z scores of individual variable before integration). On the contrary, there are several districts with high level of development in almost all the sectors. In order to assess the overall level of socio-economic development of scheduled caste of the state z scores have been calculated which is shown in table 6.2 and they are added district wise to find out composite index of socio-economic development.

Fig 6.3 based on this table shows the graded distribution of these integrated scores among the districts of the state. The general picture that emerges from the spatial distribution of these variables, is that, the overwhelming majority of the southern districts show encouraging figures for all the selected variables. The eastern districts show either medium of low level of socio-economic development of scheduled caste people, whereas, western districts do not show any regular pattern. The overall development, in fact, is the

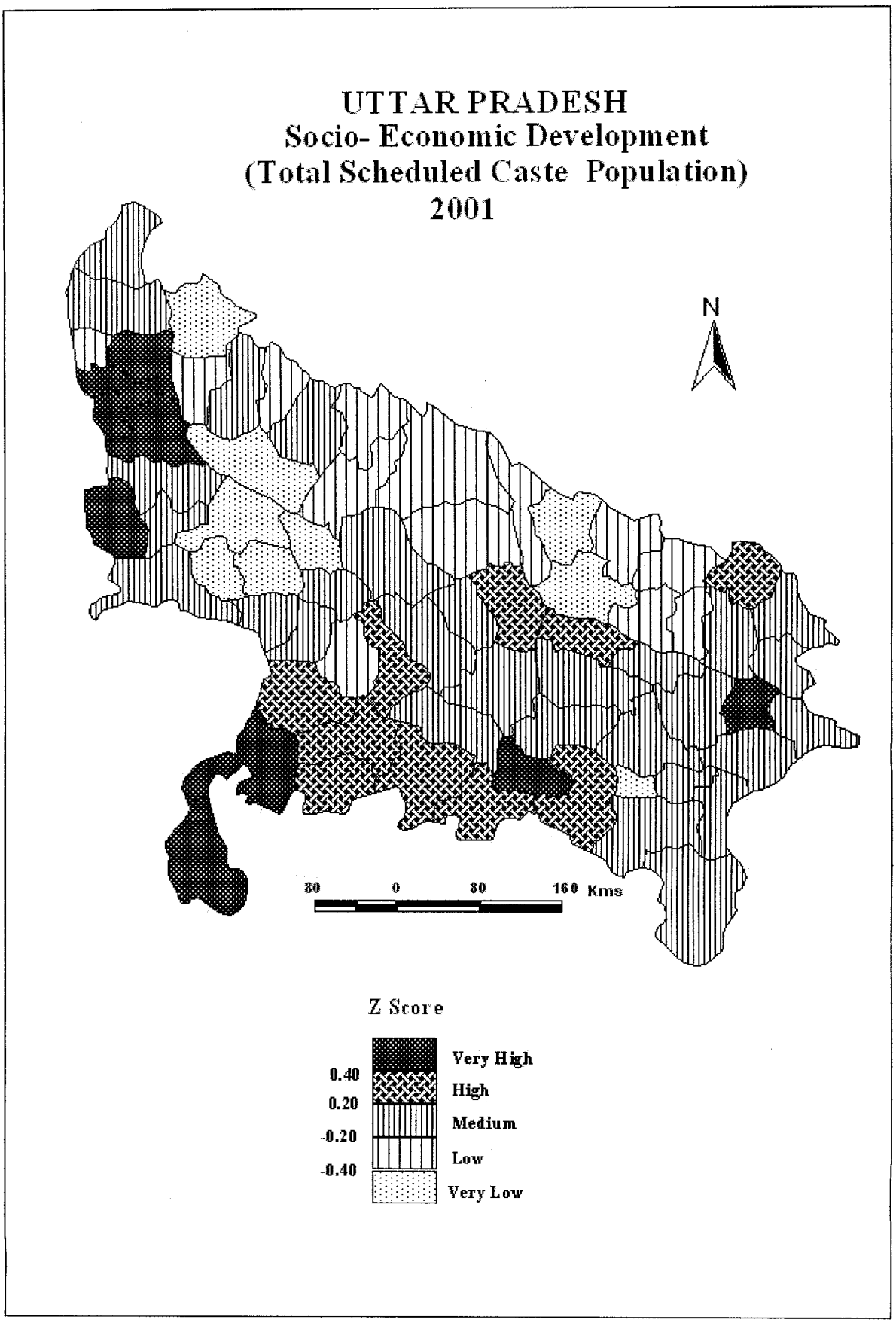
UTTAR PRADESH
Socio- Economic Development
(Total Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Z Score
0.40
0.20
-0.20
-0.40
Very High
High
Medium
Low
Very Low

Fig. 6.3

attainment of districts with respect to various selected variables recorded uneven spatial pattern of development. The districts of very high level of socio-economic development (with composite index of more than 0.40) of scheduled caste form two identifiable regions, one in the west and the other in the south with three isolated districts Mau, Kaushambi and Mathura. The districts of western region of this grade are Meerut, Ghaziabad, Baghpat and Bulandshahar whereas the districts Jhansi and Lalitpur form the southern region.

The high scores (0.20 to 0.40) of socio-economic development is seen mostly in the southern districts in the form of the region of seven districts namely, Jalaun, Kanpur Nagar, Hamirpur, Mahoba, Banda, Chitrakoot and Allahabad districts. One very small region of this grade consisted of the eastern districts Barabanki and Faizabad. The medium level of socio-economic development ranging from (-0.20 to 0.19) is mostly confined in the form of long discontinuous region of twenty five districts running from west to east including the districts Aligarh, Hathras, Agra, Etawah, Kannauj, Auriaya, Hardoi, Lucknow, Unnao, Fatehpur, Rae Bareilly, Pratapgarh, Sitapur, Ambedkar Nagar, Gorakhpur, Khushinagar, Deoria, Ballia, Ghazipur, Jaunpur, Varanasi Chandauli, Mirzapur and Sonbhadra. One tiny region of this grade is formed by the western districts Saharanpur and Muzaffar Nagar.

The low scores (-0.40 to -0.19) of composite index is found in two identifiable regions. One region is formed by the districts of Pilibhit, Shahhahanpur, Kheri, Hardoi and Bahraich whereas the other region is formed by the districts Balrampur, Siddharth Nagar, Basti and Sant Kabir Nagar. The lowest scores of this composite index is found in nine districts only. Among them only five western districts Badaun, Etah, Firozabad, Mainpuri and Farrukhabad form an identifiable region of considerable size. One tiny region of this grade is constituted by the two eastern districts Shrawasti and Gonda whereas rest of the two districts are far apart.

Employment vis-à-vis Development Disparity Regions of Scheduled Caste Population

After examining the employment regions and levels of development in the preceding chapter it would be worthwhile to study employment force in relation to development disparity in the study area. Here an attempt is made to identify regions of relationship of scheduled caste employment force with their economic development, social development and socio-economic development. For this purpose the computed values of z scores of employment rate of scheduled caste and composite z score for each set of economic, social and socio-economic development of scheduled caste are taken together in the table no. 6.3.

Total Employment Rate vis-à-vis Economic Development Scheduled Caste Population

It is clear from the fig 6.4 that the spatial distribution of total employment rate of scheduled caste vis-à-vis their economic development, that the range of variation of employment rate is higher than the range of variation of economic development. High employment rate of total scheduled caste people is observed in only fourteen districts, out of which seven districts Balrampur, Barabanki, Faizabad, Mahoba Banda, Lalitpur and Bulandshahar have high level economic development also. Rest of the seven districts Hamirpur, chitrakoot, Kaushambi, Sonbhadra, Maharajgang, Siddharath Nagar and Shrawasti have medium level of economic development. Thus the areas of high level of total employment rate with high and medium level of economic development are mostly confined in eastern most and southern most districts of the state in the form of continuous belts. The combination of high level of total employment rate with low level of economic development for this population group is not found in the study area. There are forty two districts in the category of medium level of scheduled caste employment rate out of which thirty seven districts show medium level of economic development.

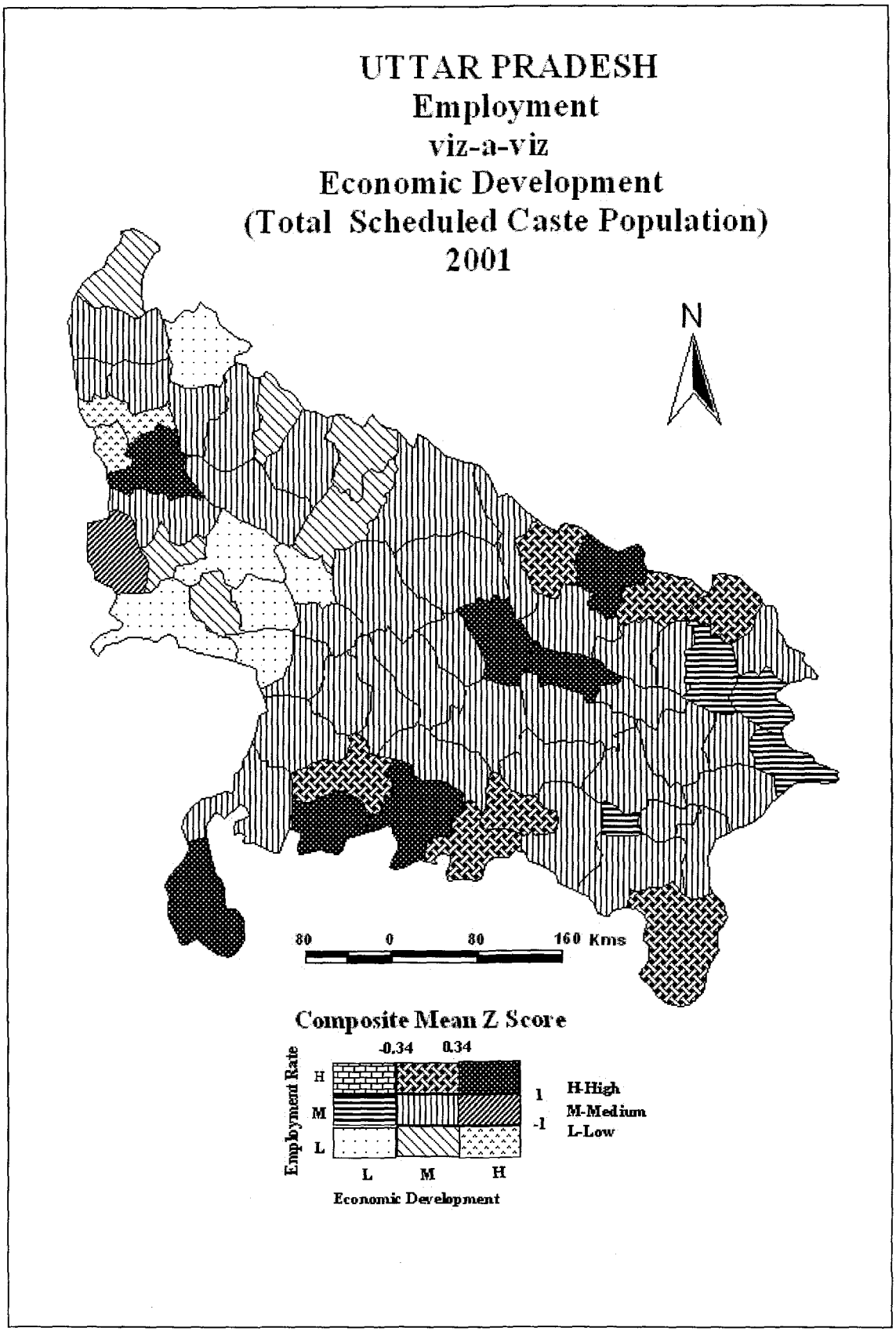
UTTAR PRADESH
Employment
viz-a-viz
Economic Development
(Total Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.34 0.34
H
M
L
Employment Rate
1
-1
H-High
M-Medium
L-Low
L M H
Economic Development

Fig. 6.4

Table 6.3 District wise Levels of Employment Rate and Levels of Development, Uttar Pradesh, 2001

District	Composite mean Z Score of Economic Development	Composite mean Z Score of Social Development	Composite Mean Z Score of Socio-Economic Development	Z Score of Scheduled Caste Employment		
				Total	Rural	Urban
Saharanpur	-0.111	-0.079	-0.190	-1.082	-2.794	-0.303
Muzaffarnagar	0.331	-0.395	-0.063	0.041	0.170	0.805
Bijnor	-0.408	-0.171	-0.579	-1.167	-2.962	-1.097
Moradabad	0.190	-0.373	-0.183	-0.591	-1.149	-0.890
Rampur	0.071	-0.340	-0.270	-1.310	-3.348	-0.751
Jyotiba Phule Nagar	-0.063	-0.162	-0.226	-0.761	-1.817	-0.772
Meerut	0.294	0.301	0.595	-0.860	-0.891	-0.888
Baghpat	0.147	-0.527	-0.380	-0.417	-0.949	-0.045
Ghaziabad	0.480	0.507	0.987	-1.221	-1.979	-0.724
Gautam Buddha Nagar	1.554	-0.383	1.171	-1.207	-3.265	0.633
Bulandshahar	0.896	0.037	0.933	1.294	3.449	1.221
Aligarh	0.041	-0.054	-0.013	-0.787	-1.649	-0.582
Hathras	-0.134	-0.036	-0.170	-1.082	-2.808	0.182
Mathura	0.393	0.220	0.613	0.331	1.350	0.060
Agra	-0.346	0.201	-0.145	-1.507	-3.348	-0.939
Firozabad	-0.252	-0.169	-0.421	-1.410	-3.796	0.301
Etah	-0.388	-0.209	-0.597	-1.271	-3.150	-0.973
Mainpuri	-0.525	-0.017	-0.542	-1.469	-3.548	-2.128
Budaun	-0.198	-0.505	-0.703	-0.967	-2.467	-0.327
Bareilly	0.030	-0.177	-0.147	-0.861	-1.905	-0.787
Pilibhit	-0.148	-0.211	-0.359	-1.266	-3.207	-1.077
Shahjahanpur	-0.091	-0.151	-0.242	-1.044	-2.638	-0.859
Kheri	-0.098	-0.131	-0.229	-0.502	-1.490	0.184
Sitapur	-0.248	-0.123	-0.371	-0.503	-1.486	-0.151
Hardoi	-0.203	0.126	-0.077	-0.236	-0.832	0.099
Unnao	-0.089	-0.066	-0.154	0.242	0.465	0.075
Lucknow	-0.137	0.311	0.174	-0.489	-0.530	-0.040
Rae Bareli	-0.031	0.207	0.176	0.783	1.700	-0.156
Farrukhabad	-0.488	0.034	-0.453	-1.141	-2.807	-0.526
Kannauj	-0.103	-0.071	-0.174	-0.361	-1.000	0.454
Etawah	-0.533	0.512	-0.021	-1.403	-3.417	-1.404
Auraiya	-0.131	0.230	0.099	-0.176	-0.466	-0.891
Kanpur Dehat	-0.202	-0.071	-0.272	-0.222	-0.768	-0.293
Kanpur Nagar	0.128	0.163	0.291	-0.528	0.053	0.097
Jalaun	-0.036	0.383	0.346	0.464	1.651	0.228

Table 6.3 (Continued)

Jhansi	0.291	0.275	0.566	0.676	3.054	1.007
Lalitpur	0.355	0.233	0.588	1.987	4.808	1.784
Hamirpur	0.213	-0.013	0.201	1.052	2.851	1.461
Mahoba	0.495	-0.176	0.319	1.649	4.537	1.810
Banda	0.358	-0.082	0.276	1.566	4.086	1.022
Chitrakoot	0.076	0.234	0.310	1.782	4.254	0.881
Fatehpur	0.051	-0.002	0.049	0.895	2.022	0.140
Pratapgarh	-0.277	0.185	-0.092	0.354	0.558	-0.435
Kaushambi	0.255	0.395	0.650	1.282	2.721	3.331
Allahabad	0.200	0.028	0.228	0.522	1.607	-0.093
Barabanki	0.355	-0.047	0.308	1.134	2.370	2.081
Faizabad	0.479	-0.133	0.346	1.717	3.975	1.233
Ambedkar Nagar	0.170	-0.148	0.023	0.255	0.309	0.656
Sultanpur	-0.169	0.120	-0.049	0.429	0.695	0.134
Bahraich	-0.145	-0.182	-0.328	0.615	1.215	-0.230
Shravasti	0.338	-1.137	-0.799	1.891	4.061	2.026
Balrampur	0.464	-0.862	-0.399	2.376	5.422	1.287
Gonda	-0.201	-0.393	-0.594	0.411	0.702	-0.216
Siddharthnagar	-0.044	-0.329	-0.374	1.262	2.693	0.211
Basti	-0.114	-0.088	-0.202	0.584	1.167	-0.134
Sant Kabir Nagar	-0.002	-0.365	-0.367	0.602	1.158	1.149
Maharajganj	0.323	-0.050	0.273	1.204	2.617	0.778
Gorakhpur	-0.401	0.326	-0.074	-0.379	-0.795	-1.473
Kushinagar	-0.038	-0.042	-0.080	0.395	0.637	-0.181
Deoria	-0.502	0.617	0.115	-0.667	-1.739	-1.502
Azamgarh	-0.289	0.363	0.074	-0.314	-1.001	-0.954
Mau	-0.115	0.639	0.524	-0.290	-0.908	0.736
Ballia	-0.403	0.555	0.152	-0.765	-2.060	-0.400
Jaunpur	-0.341	0.234	-0.107	-0.198	-0.736	-0.976
Ghazipur	-0.168	0.353	0.184	-0.195	-0.692	-1.112
Chandauli	0.085	-0.035	0.050	0.167	0.379	-1.318
Varanasi	-0.190	0.321	0.131	-0.375	-0.577	0.139
Sant Ravidas Nagar	-0.512	-0.024	-0.536	-0.656	-1.779	-0.369
Mirzapur	-0.085	0.213	0.128	0.647	1.398	0.871
Sonbhadra	-0.067	0.224	0.156	1.108	2.629	-1.074

These districts are arranged in the form of one prominent region of eight western districts and a big continuous region of twenty eight districts extending from east to central and southern part of the state. Four districts are found to have a combination of medium level of employment rate with low level of economic development. Only one district, Mathura shows medium

level of employment rate of scheduled caste with high level of economic development. Low level of total employment rate of scheduled caste is observed in fourteen districts of the state. Six western districts among them are showing low level of economic development also. Out of these six districts, five districts Etah, Farrukhabad, Mainpuri, Etawah and Agra form a small pocket . The other six districts of low level of total employment rate have medium level of economic development. These districts are also confined in the western part of the state. Rest of the two western districts (Gautam Buddha Nagar and Ghaziabad) of low level of total employment rate are joining high level of economic development.

Rural Employment Rate vis-à-vis Economic Development of Scheduled Caste Population

The interrelationship of rural employment of scheduled caste with the economic development is depicted from the fig 6.5. It shows that out of total fourteen districts of high level of rural employment rate, six districts (Balrampur, Faizabad Bulandshahar, Lalitpur, Mahoba and Banda) are showing high level of economic development, whereas, rest of the eight districts are showing medium level of economic development. It is clear from the picture that except Bulandshahar in the west, all the thirteen districts of high level of rural employment rate with high or medium level of economic development are concentrated in the eastern and southern margins of the state.

Medium level of rural employment rate is seen in forty two districts of the state. Thirty five districts among them have medium level of economic development. These districts form a smaller region of five western districts; Muzaffar Nagar, Baghpat, Meerut, Jyotiba Phule Nagar and Moradabad and a continuous region of twenty eight districts running from east to central and southern part of the state. Widely scattered districts of this group are Ghaziabad, Mathura and Barabanki. Rest of the four districts of medium level of rural employment rate of scheduled caste combines with the low level of

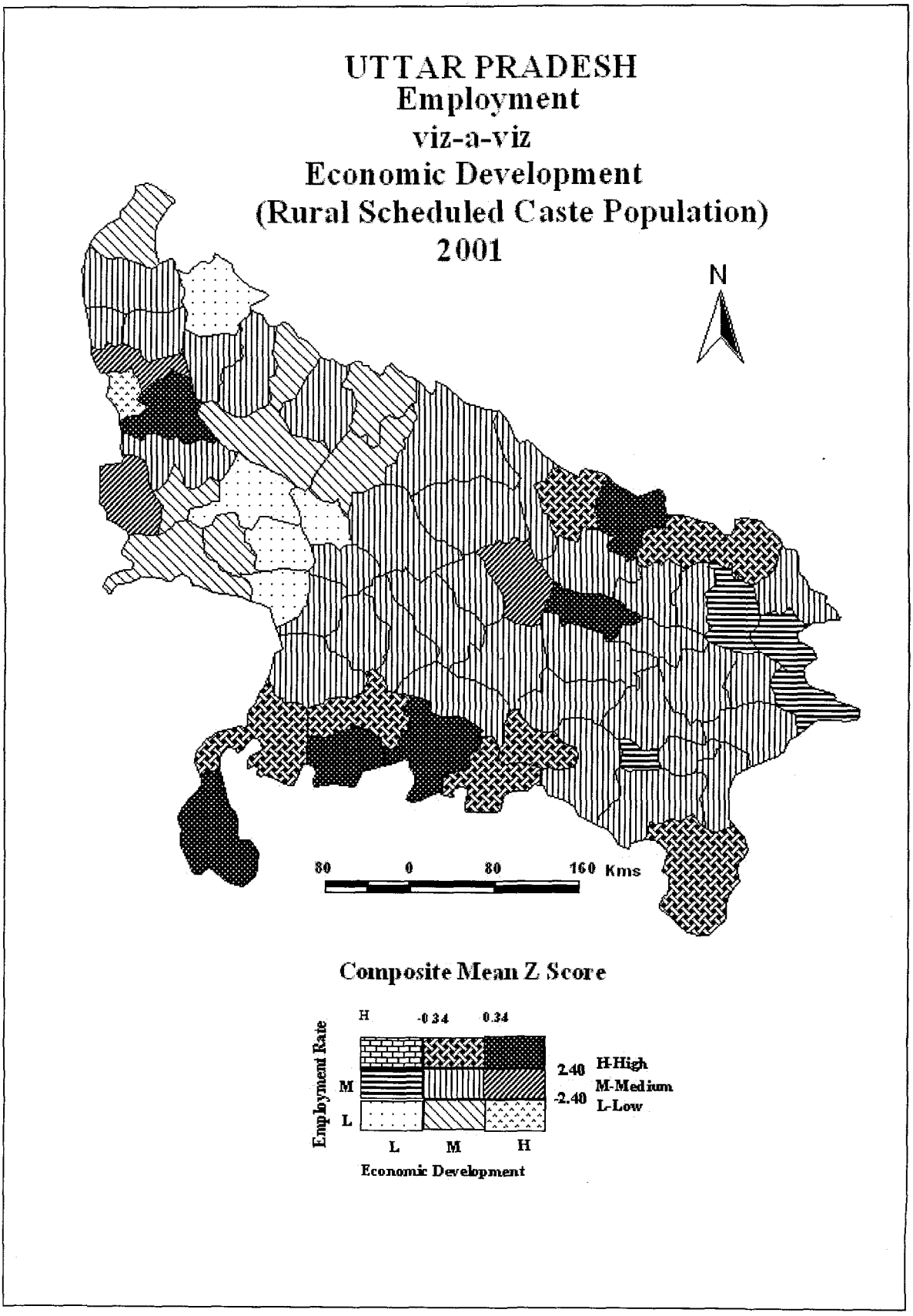
UTTAR PRADESH
Employment
viz-a-viz
Economic Development
(Rural Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
H
-0.34
0.34
Employment Rate
M
L
2.40
-2.40
H-High
M-Medium
L-Low
L M H
Economic Development

Fig. 6.5

economic development, out of which Gorakhpur, Deoria and Ballia are grouped together.

The third group of low level of rural employment rate is observed in fourteen districts. Only five districts among them are showing a combination of low level of rural employment rate with low level of economic development in which four western districts; Etah, Farrukhabad, Mainpuri and Etawah are concentrated in a form of small pocket. Low level of rural employment with medium level of economic development of scheduled caste is visible in eight districts of the state. Seven districts among them are distributed in the form of two small regions of three western districts Hathras, Agra and Firozabad and four western districts Rampur, Badaun, Shahjahanpur and pilibhit. Only one district Gautam Buddha Nagar is showing low level of employment rate of rural scheduled caste with high economic development

Urban Employment Rate vis-à-vis Economic Development of Scheduled Caste Population

The regions of urban employment rate of scheduled caste verses economic development are shown in fig 6.6. There are only twelve districts of high urban employment rate, out of which seven districts are showing high level of economic development also. Rest of the five districts of high urban employment rate coincides with medium level of economic development. Most of the districts of these two grades are confined either in the eastern or southern part of the state in closer proximately of each other.

Around seventy percent districts are falling in the category of medium level of urban employment rate, out which forty two districts are showing medium level of economic development. These districts are mostly distributed at every margin of the state and runs in the form of very high discontinuous region. In rest of the seven districts of medium level of urban employment rate, four districts are showing low level of economic development and three districts

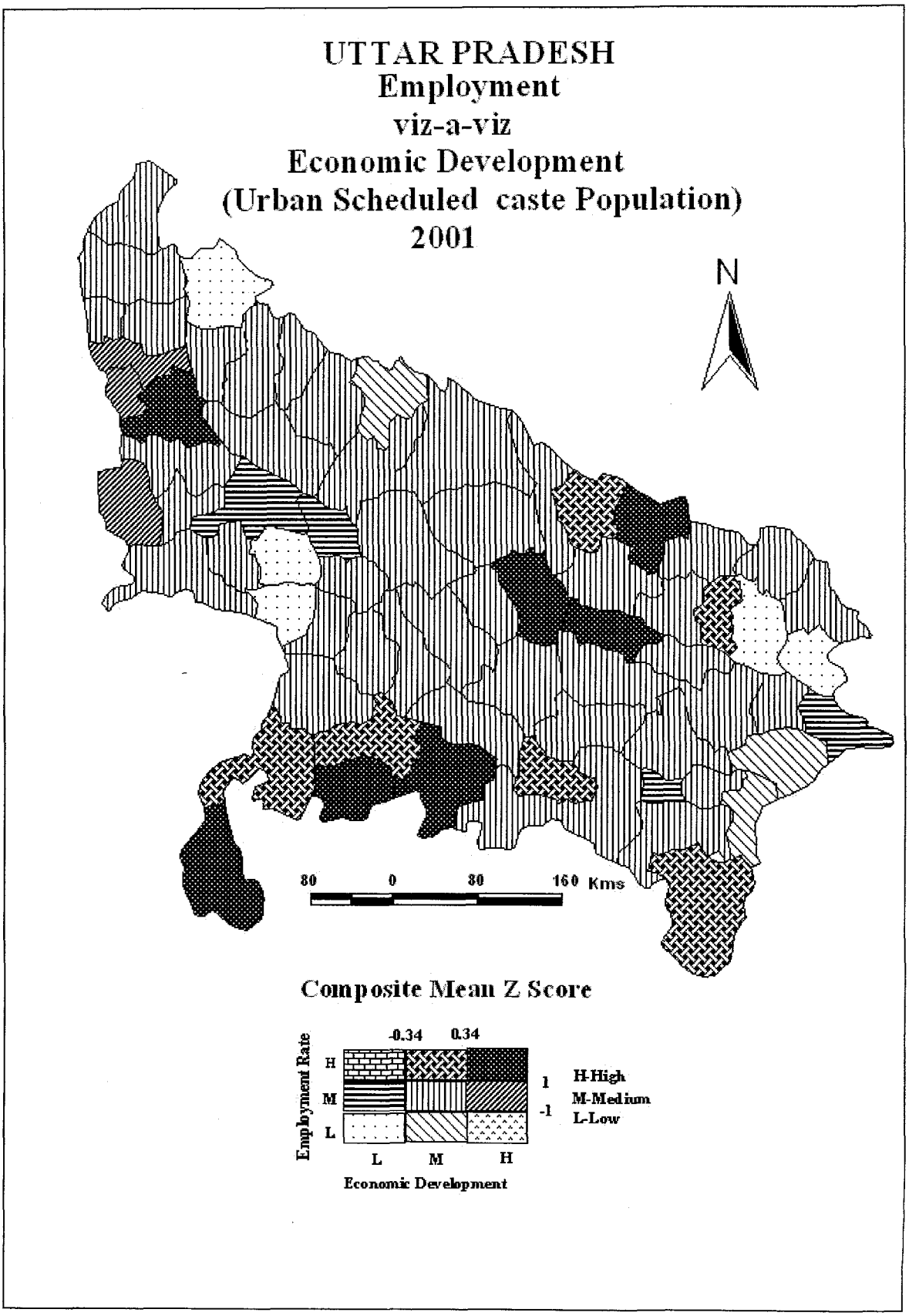
UTTAR PRADESH
Employment
viz-a-viz
Economic Development
(Urban Scheduled caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.34 0.34
H
M
L
1
-1
H-High
M-Medium
L-Low
Employment Rate
L M H
Economic Development

Fig. 6.6

are showing high level of economic development and all of them don't form any identifiable region. The figure also reveals that out of nine districts of relatively high level of urban employment rate of scheduled caste, five lie in the category of low level of economic development and four lie in the category of medium level of economic development. Among these four districts of low urban employment rate three districts Sonbhadra, Chandauli and Ghazipur form a small identifiable region.

Total Employment Rate vis-a-vis Social Development of Scheduled Caste Population

Fig 6.7 reveals that the districts with reference to composite z scores, social development may be arranged into three categories of High (over 0.32), Medium (-0.32 to 0.32) and Low (below -0.32). The category of high level of total employment rate of scheduled caste is identified in fourteen districts, in which one belong to high, ten belong to medium and three belong to low level of social development. Out of these ten districts of high total employment rate verses medium social development, four southern districts Hamirpur, Mahoba, Banda and Chitrakoot form a region. Three eastern districts Shrawasti, Balrampur and Siddharthnagar of high total employment rate with low social development are arranged in the form of small pocket.

Medium level of total scheduled caste employment rate is observed in thirty two districts, in which twenty eight belong to medium level of social development and majority of which are arranged in the form of big continuous region running from east to central and southern part of the state. Seven districts of the medium level of total employment rate combines with high level of social development in which six eastern districts Gorakhpur, Deoria, Azamgarh, Mau, Ballia and Ghazipur form a compact pocket. Majority of districts of the combination of medium level of total employment rate with low social development are confined in the western part of the state.

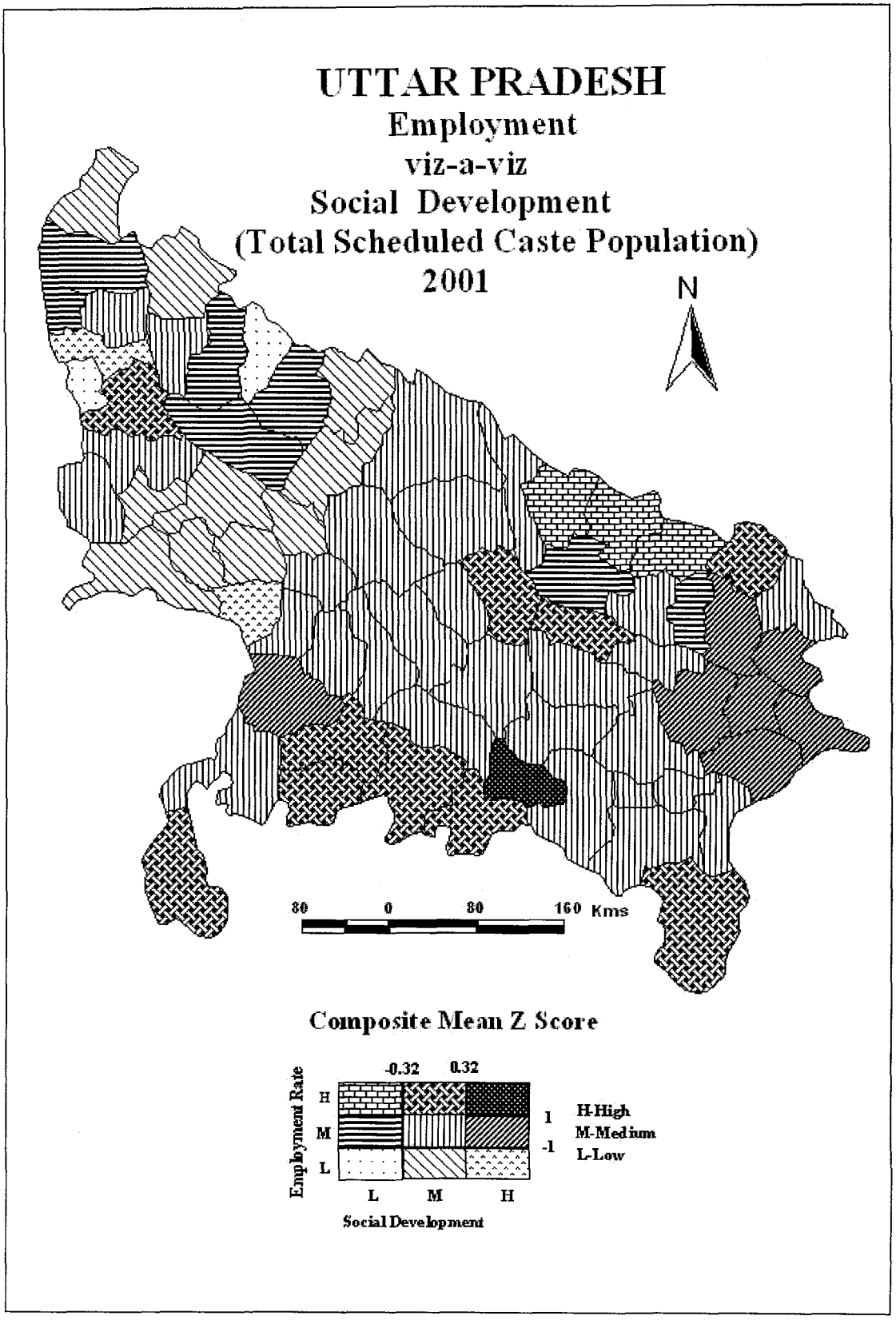
UTTAR PRADESH
Employment
viz-a-viz
Social Development
(Total Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.32 0.32
Employment Rate
H
M
L
1
-1
H-High
M-Medium
L-Low
L M H
Social Development

Fig. 6.7

Low level of total employment rate of scheduled caste is observed in fourteen districts. Out of which two districts are showing high level and and two low level of social development and ten districts are showing medium level of social development. The eight western districts Pilibhit, Shahjahanpur, Farrukhabad, Etah, Hathras, Agra, Firozabad, Etawah and Mainpuri of the combination of low level of total employment rate and medium social development form a identifiable region.

Rural Employment Rate vis-à-vis Social Development of Scheduled Caste Population

Fig 6.8 clearly indicates that out of all the thirteen districts of high level of scheduled caste employment rate,. nine districts coincide with medium level of social development, out of which six districts namely, Lalitpur, Jhansi, Hamirpur, Mahoba, Banda and Chitrakoot form a group. One district Kaushambi coincides with high level of social development. The combination of high rural employment rate with low social development consist of the three eastern districts Sharawasti, Balrampur and Siddharthnagar.

Out of forty two districts of medium level of rural scheduled caste employment rate, twenty nine districts fall in the category of medium level of social development, eight districts in high level of social development and five districts in the category of low level of social development. Twenty three districts of the combination of medium employment rate with medium level of social development form a distinct continuous region running from east to central and southern part of the state. Apart from it, a compact pocket of the category of medium level of rural employment rate with high social development is observed in six eastern districts such as, Gorakhpur, Deoria, Azamgarh, Mau, Ballia and Ghazipur.

Low level of rural employment rate of scheduled caste is found in fourteen districts among them one district i.e., Etawah exhibit high social development,

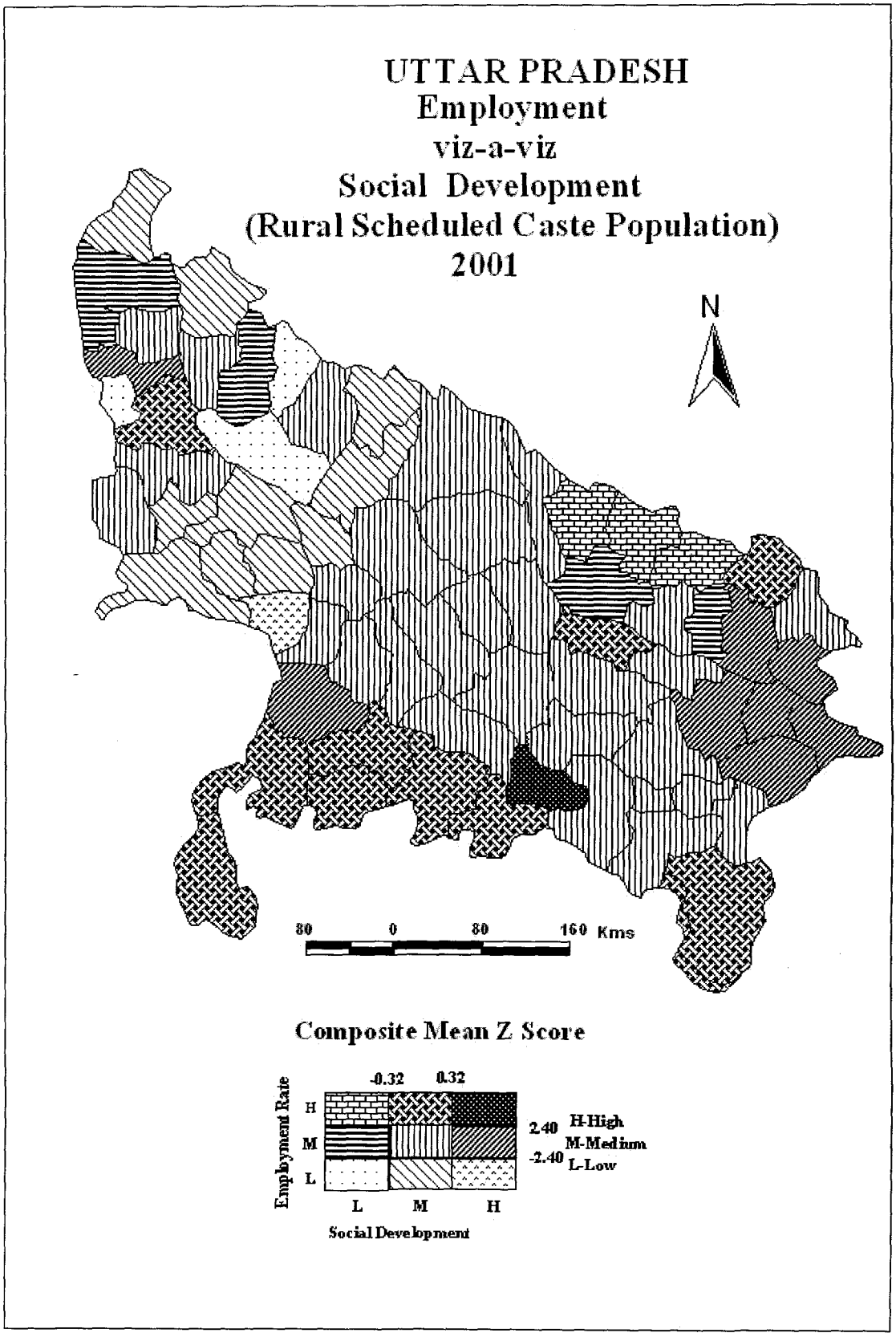
UTTAR PRADESH
Employment
viz-a-viz
Social Development
(Rural Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.32 0.32
H
M
L
Employment Rate
2.40 H-High
M-Medium
-2.40 L-Low
L M H
Social Development

Fig. 6.8

three districts Gautam Buddha Nagar, Badaun and Rampur show low level of social development, whereas rest of the ten districts indicates medium level of social development. Eight of these districts are confined in the western part of the state in the form a region.

Urban Employment Rate vis-à-vis Social Development of Scheduled Caste Population

Fig 6.9 clearly indicates that the category of high urban employment rate of scheduled caste is identified in twelve districts out of which one district i.e., Kaushambi is showing high social development, the other three districts are showing low social development and rest of the eight districts of high urban employment rate are showing medium social development. Among these eight districts five southern districts Lalitpur, Jhansi, Hamirpur, Mahoba and Banda are arranged in the form of a pocket.

Medium level of urban employment rate is observed in forty nine districts of the state out of which thirty five districts are showing medium level of social development. Majority of them are distributed in the form of discontinuous region running from west to central and south eastern part of the state. Six districts Azamgarh, Mau, Ballia, Meerut, Ghaziabad and Jalaun of medium employment rate combines with high level of social development. Rest of the eight districts of medium urban employment combines with low social development and they are mostly confined to the western part of the state.

The category of low urban employment rate of scheduled caste is identified in nine districts, out of which five Bijnor, Pilibhit, Mainpuri, Chandauli and Sonbhadra belong to medium level of social development and four districts Etawah, Gorakhpur, Deoria and Ghazipur belong to high level of social development. These districts don't form any identifiable region.

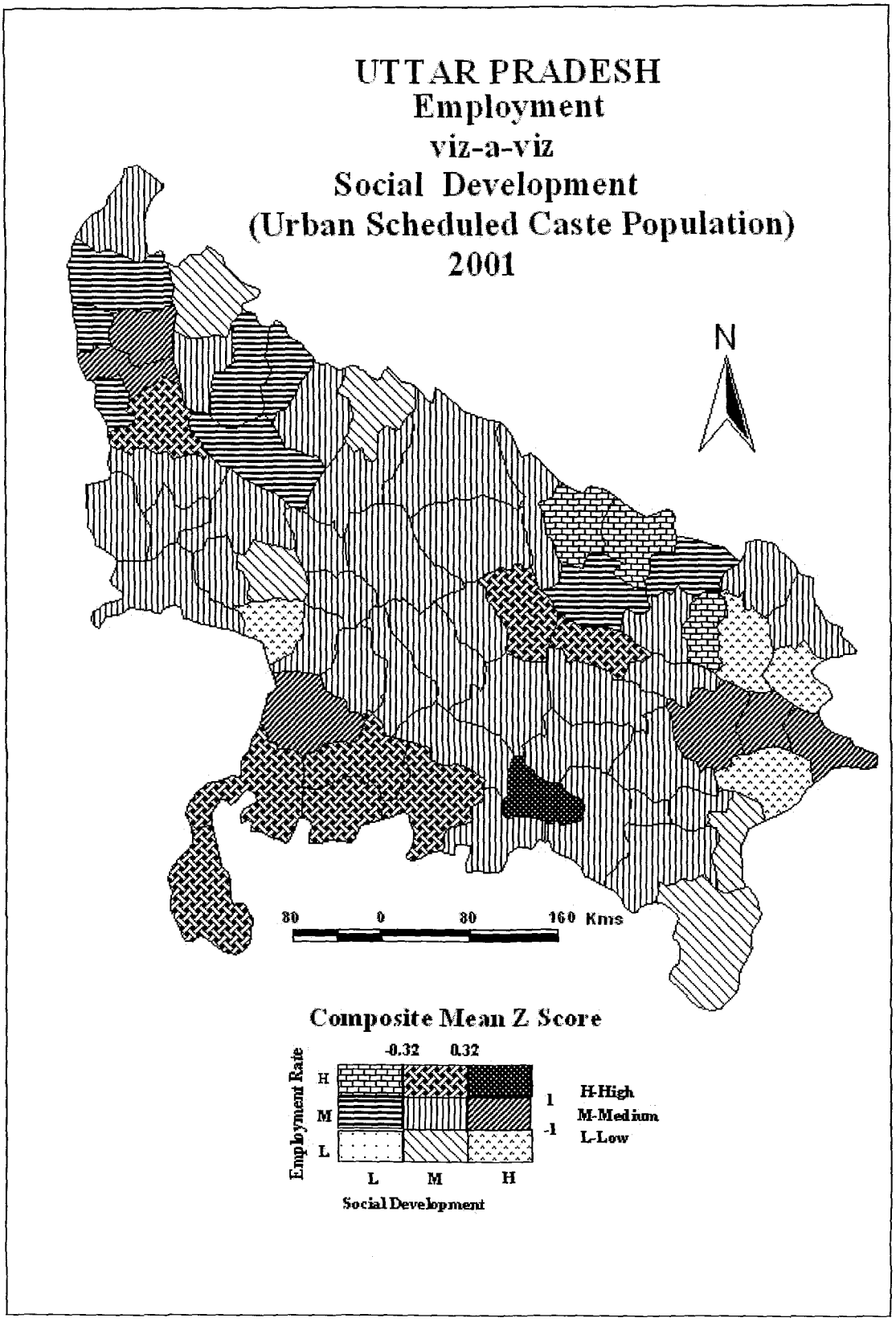
UTTAR PRADESH
Employment
viz-a-viz
Social Development
(Urban Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.32 0.32
H
M
L
Employment Rate
1
-1
H-High
M-Medium
L-Low
L M H
Social Development

Fig. 6.9

Total Employment Rate vis-à-vis Socio-Economic Development of Scheduled Caste Population

The districts with reference to composite z scores of socio-economic development may be arranged in three categories of high (above 0.40), medium (-0.40 to 0.40) and low (below-0.40) The categories of employment rates of total and urban scheduled caste populations are having the same values and they are high (above 1.00), medium (-100 to 1.00) low (below -1.00). The categories of rural scheduled caste employment rate are high (above 2.40), medium (-2.40 to 2.40), low (below -2.40).

The districts wise distribution of total employment rate vis-à-vis socio-economic development is shown in the fig 6.10. The grade of high employment rate is found in fourteen districts, out of which three widely scattered districts, Bulandshahar, Lalitpur and Kaushambi combines with high level of socio-economic development and one district, Shrawasti combines with low socio-economic development. Rest of the ten districts of this group combines with medium level of socio-economic development. In these ten districts, seven districts are forming two identifiable regions of three eastern districts Balrampur, Siddharthnagar and Maharajgang and four southern districts Hamirpur, Mohaba, Banda and Chitrakoot.

The category of medium level of scheduled caste total employment rate is identified in forty two districts. Leaving three scattered districts of low socio-economic development and four scattered districts of high socio-economic development, all the other thirty five districts are showing medium level of socio-economic development. Overwhelming majority of them form a continuous and dominant region to cover eastern, central and south eastern part of the state.

The third category of low level of employment rate is observed in fourteen districts, two of them show high level of socio-economic development and

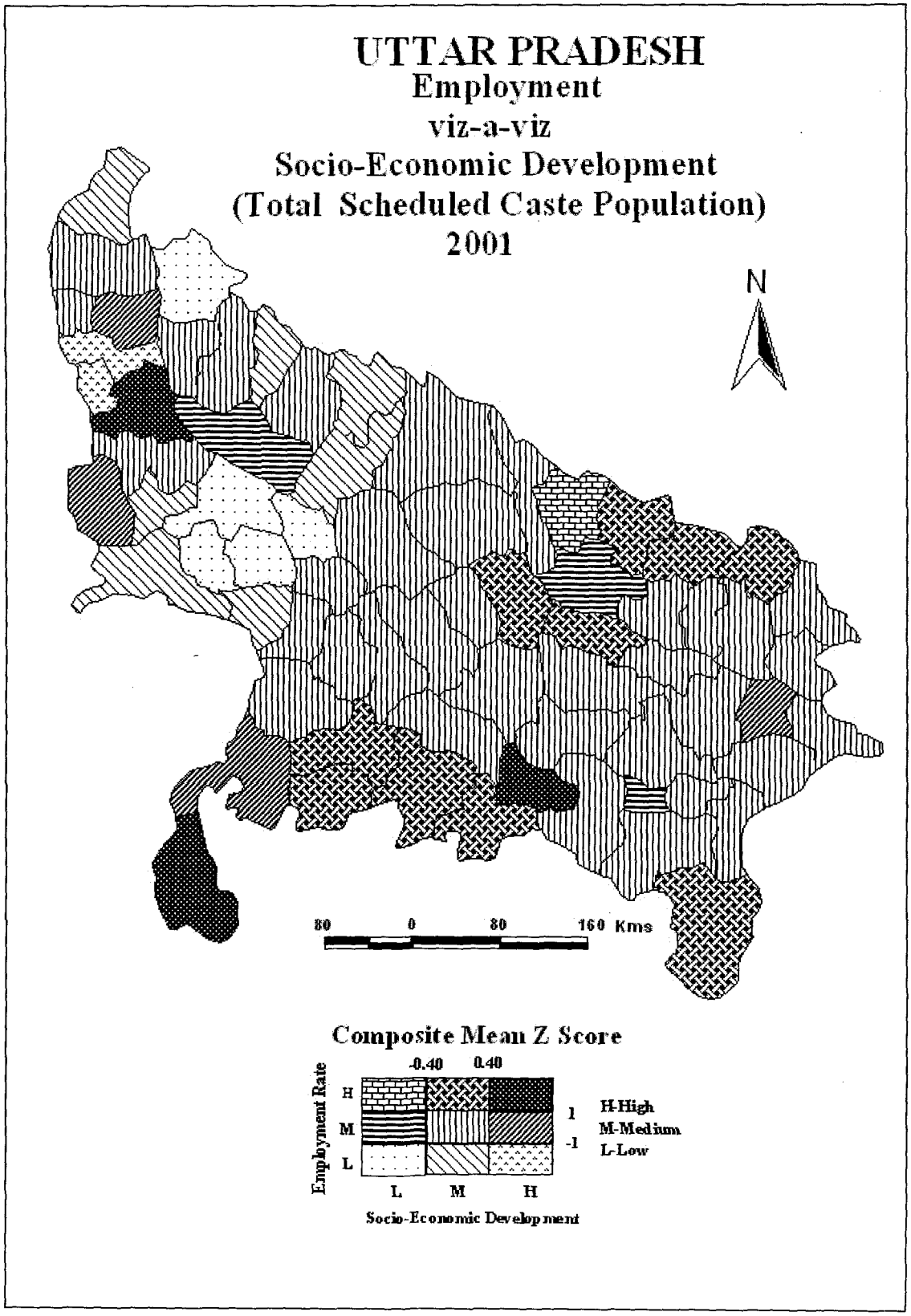
UTTAR PRADESH
Employment
viz-a-viz
Socio-Economic Development
(Total Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.40 0.40
Employment Rate
H
M
L
1
-1
H-High
M-Medium
L-Low
L M H
Socio-Economic Development

Fig. 6.10

five among them are with low level of socio economic development. Rest of the seven districts lie in the category of medium employment rate with medium level of socio-economic development. Among these fourteen districts, four western districts Etah, Firozabad, Mainpuri and Farrukhabad of the combination of low employment rate with high socio economic development are forming a region.

Rural Employment Rate vis-à-vis Socio-Economic Development of Scheduled Caste Population

It is clearly indicated in the fig 6.11 that, high level of rural employment rate coincides with high level of socio-economic development in only four districts Bulandshahar, Kaushambi, Jhansi and Lalitpur. The combination of high rural employment rate with low socio-economic development is identified in single district Shrawasti. Apart from it, the union of high rural employment rate with medium socio-economic development is visible in nine districts. Seven districts among them form two recognizable regions of, four southern districts Hamirpur, Mahoba, Banda and Chitrakoot and the other region of three eastern districts Balrampur, Siddharthnagar and Maharajganj.

Medium level of rural employment rate is observed in forty two districts of the state. Among these forty two districts, only two districts combines with low grade of socio-economic development and four scattered districts unite with high socio-economic development and rest of thirty six districts coincide with medium level of socio-economic development. Majority of them form a dominant continuous region covering thirty districts of the eastern central and southern part of the state.

Low level of scheduled caste rural employment rate is found in only fourteen western districts, of which one district has high socio-economic development, seven have medium level of socio-economic development, six districts have low level of socio-economic development. The identifiable region of low

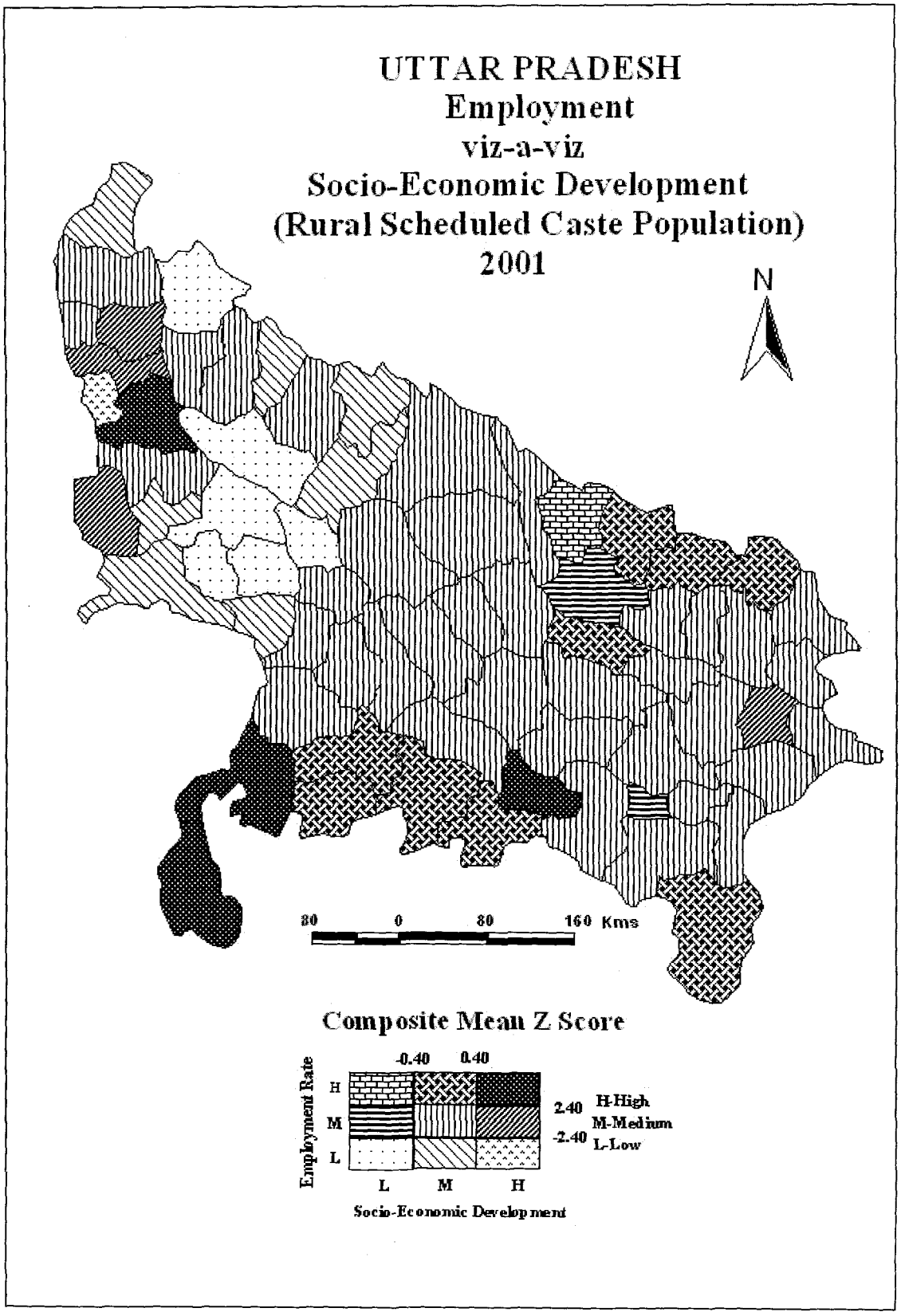
UTTAR PRADESH
Employment
viz-a-viz
Socio-Economic Development
(Rural Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.40 0.40
H
M
L
2.40 H-High
M-Medium
-2.40 L-Low
Employment Rate
L M H
Socio-Economic Development

Fig. 6.11

level of rural employment rate with medium socio economic development is found in Hathras, Agra and Etawah districts where as the recognizable region of low rural employment rate with high socio-economic is formed by the districts Badaun, Etah, Farrukhabad, Mainpuri and Firozabad.

Urban Employment Rate vis-à-vis Socio-Economic Development of Scheduled Caste Population

The index of urban scheduled caste employment vis-à-vis socio-economic development has been worked out with a view to do a more meaningful comparison and to know the nature and pattern of the distribution of employment and over all development.

Fig. 6.12 reveals that the concentration of high urban employment rate is observed in twelve districts of the state, four among them unite with high socio-economic development, seven districts combine with medium level of socio-economic development and one with low level of socio-economic development. All the districts of these three combinations don't form any recognizable region. Medium level of urban employment rate is observed in forty nine districts of the state. Out of them five districts show high socio-economic development, six show low socio-economic development and thirty eight districts show medium level of socio-economic development.

The identifiable region of the medium urban employment rate vis-à-vis socio-economic development is seen in three western districts Meerut, Ghaziabad and Gautam Bauddha Nagar. The recognizable region of combination of medium urban employment rate with low socio-economic development is recognized in three western districts Etah, Firozabad and Farrukhabad. A big dominant discontinuous region of medium urban employment rate with medium socio-economic development runs through western part of the state to eastern, central and south eastern parts. The third category of low urban

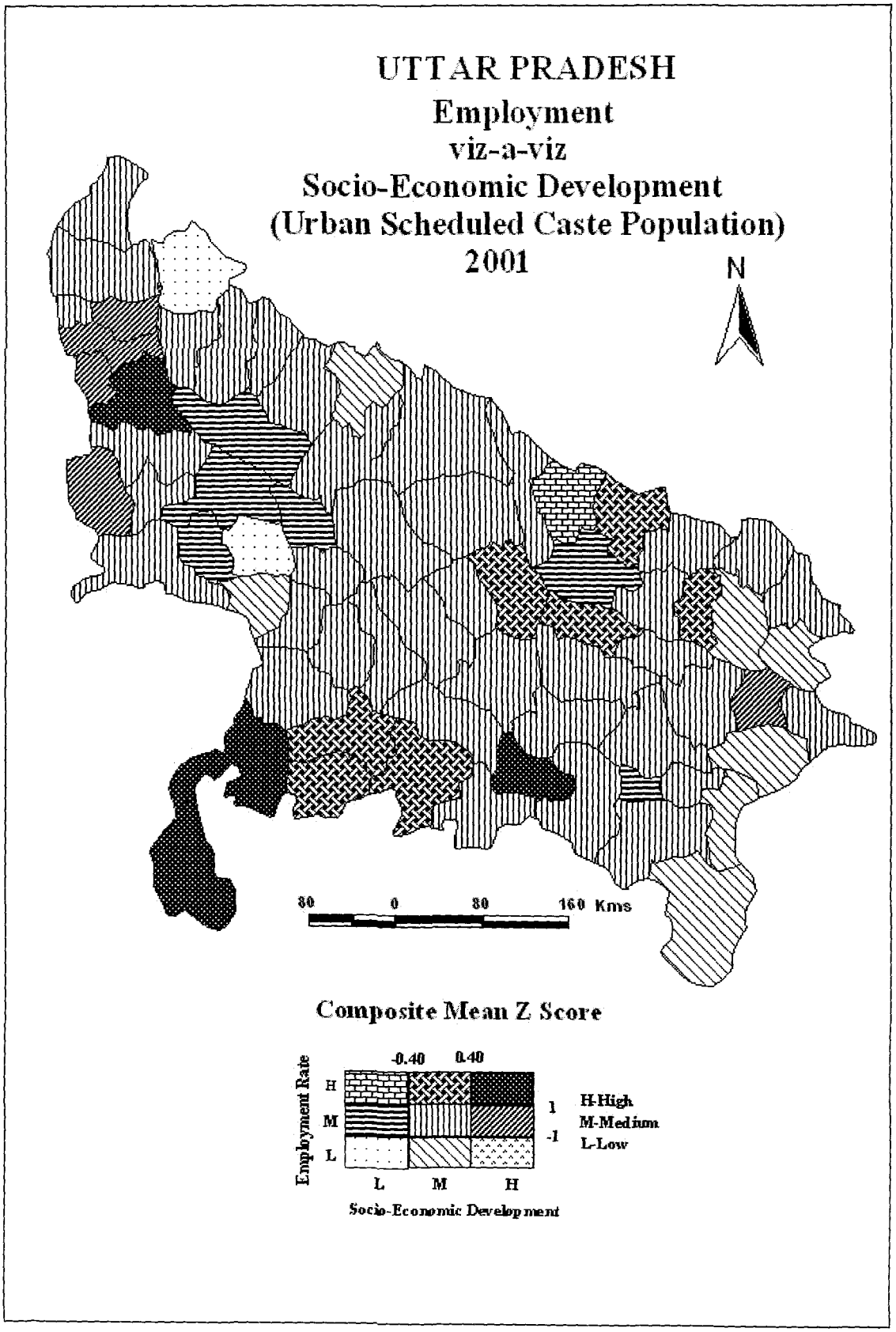
UTTAR PRADESH
Employment
viz-a-viz
Socio-Economic Development
(Urban Scheduled Caste Population)
2001
N
80 0 80 160 Kms
Composite Mean Z Score
-0.40 0.40
Employment Rate
H
M
L
1
-1
H-High
M-Medium
L-Low
L M H
Socio-Economic Development

Fig. 6.12

employment rate is identified in only nine districts out of which two districts Bijnor and Mainpuri have low level of socio-economic development. Rest of the seven district namely Gorakhpur, Deoria, Ghazipur, chaindauli, Sonbhadra, Plibhit and Etawah show medium level of socio economic development

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CONCLUSIONS AND SUGGESTIONS

The present doctoral work is a humble effort to focus on the issue of scheduled caste employment in Uttar Pradesh, a comparatively less developed state of India. No study of the development process could be completed without taking into account the contribution of scheduled caste employment, specially its rate and structure of employment. They account for 21.15 per cent of the total population of Uttar Pradesh, the most populas state of India. In fact, the contribution of this segment of population should be studied in seclusion as well as in association with the employment of total population so that a suitable plan could be made to improve the quality of their structure of employment and in the long run to achieve a balanced development.

The present study dealing with the regional trends and patterns of employment of scheduled caste population in Uttar Pradesh comes up with several significant conclusions. While analysing the results, it has been found that the scheduled caste people exhibit very high and high densities in smaller pockets of eastern and south eastern districts with an exception of three districts namely, Ghaziabad, Meerut and Agra in the west. When this result of population distribution is supplemented with the other results of population distribution like ratio of scheduled caste population and density of total population of the state, it is found that lower densities of scheduled caste population in few districts don't mean that their percentage in total population of the state is low but it is the result of lower densities of total population in those areas. For example Sonbhadra lies in the lowest density region of both the scheduled caste population as well as total population but it occupies the top most position as far as the ratio of scheduled caste population to total population is concerned.

Scheduled caste employment rate (34.7 per cent) in economically gainful activities is higher in comparison to the employment rate of total population (32.5 per cent) of Uttar Pradesh. It is mainly because of relatively high

incidence of female employment among the scheduled caste population. This could be attributed to the economic exigencies and social permissibility among this section of society. Moreover, the kinds of jobs taken up by this group of people do not have any demand on education or skill.

On comparing the data of employment rate in 2001 with 1991 census, it has been found that the net gain of 0.7 per cent of the employment rate of total population is observed in the decade 2001, whereas, the corresponding figure for scheduled caste population has declined to 0.3 per cent in the same decade. This may be the result of increase in the literacy rate of scheduled caste population. However, in tune with total population, their employment rates are high in rural areas than in urban areas because of the differences in demands of the society and economy of the two areas. The late entry into workforce also reduces scheduled caste employment rates in the urban areas. Moreover, various concessions offered by the state to the scheduled castes for their social and economic uplift have been utilized more in the urban areas and less in the rural area.

Scheduled caste employment rate is high both in rural as well as in urban areas in comparison to the employment rate of total population. In rural areas higher opportunities of full time agricultural work (marginal labour) broadens the base of scheduled caste employment, whereas in urban areas the increasing employment opportunities in menial service sector seems to be associated with their higher participation rate. The percentage of marginal workers have been continuously increasing in total population as well as in scheduled caste population but this increase is more pronounced in scheduled caste population. The greater increase of marginal workers among the scheduled caste population seems to be associated with the continuous increase in the growth rate of scheduled caste population in the selected decades and also due to advancement in agricultural techniques.

The variation in rural scheduled caste employment rate is much similar to that of total population. However, the range of variation is considerably wide (27.39 per cent to 48.03 per cent) in rural scheduled caste population, whereas, it is quite narrow (22.85 to 35.07) in urban scheduled caste population. The region of very high and high rural employment rates are concentrated in majority of southern district and smaller pockets of few eastern and few central districts. Its medium range is concentrated in the eastern districts in the form of a region, whereas, western districts of the study area represent low and very low level of scheduled caste employment. In case of their urban counter part very high and high rate of employment rate is confined to the southern districts and medium range is confined to the central districts forming a belt. With few exceptions, all the districts of western Uttar Pradesh lies in the category of low and very low rate of employment.

The variations in employment rate of rural scheduled caste population are significantly determined by the indicators X_5 (per capita net sown area), X_6 (cropping intensity), X_8 (net irrigated area), X_{12} (per cent of scheduled caste urban population), X_{14} (total employment rate of scheduled caste population) and X_{17} (scheduled caste literacy rate). In urban population this variation is mainly caused by X_{12} (per cent of scheduled caste urban population) and X_{13} (per capita income).

Contrary to the whole rural employment rate of scheduled caste population, rural males are showing a very narrow range of variation in their employment rate. It varies from 42.4 per cent in Gautam Budha Nagar to 56.7 per cent in Shrawasti district. From the figure of its graded distribution, it is clear that maximum degree of scheduled caste male employment rate is observed in a compact pocket of central and eastern districts. High grade of employment is observed in a pocket of southern districts and it gradually decreases towards east as well as towards west. The urban scheduled caste employment rate varies from 38.7 (Deoria) to 50.0 per cent (Shrawasti district). However, the

distribution of various grades of urban employment is not displaying any regular pattern. Only one big region of low grade employment is observed in the eastern part of the state.

It may be concluded that the regional variation in employment rate of rural male scheduled caste population is mainly caused by the indicators, viz, X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{29} (total male employment rate of scheduled caste population) and X_{31} (urban male employment rate of scheduled caste population). Thus, these are the chief determinants but the magnitude of their effects is not uniform. The analysis of correlation leads to the main conclusion that X_{16} (urban employment rate of scheduled caste population), X_{29} (scheduled caste total male employment rate) and X_{30} (scheduled caste rural male employment rate) have substantial impact on the distribution of employment rate of urban male scheduled caste population of Uttar Pradesh.

In case of rural scheduled caste female employment, the range of variation is observed between 5.9 per cent (Shahjahanpur district) to 42.1 per cent (Chitrakoot district). The participation of scheduled caste females in economic activities gradually decreases from southern to eastern and western districts reaching to its medium grade in the east and very low grade in majority of the districts of the western half of the state. This pattern gets slightly changed in the urban counter part of scheduled caste females. The urban female employment rate gradually decreases toward the east but the homogeneity of low grade of female scheduled caste employment is broken by other grades.

The results of coefficient of correlation of rural scheduled caste females with socio economic indicators lead to conclusion that X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{29}

(total female employment rate of scheduled caste population) and X_{31} (urban female employment rate of scheduled caste population) are the chief determinants but the magnitude of their effects are not equal. It is analysed that regional variation in employment rate of urban female scheduled caste population is mainly caused by X_{14} (total employment rate of scheduled caste population), X_{15} (rural employment rate of scheduled caste population), X_{16} (urban employment rate of scheduled caste population), X_{29} (scheduled caste total female employment rate) and X_{30} (scheduled caste rural female employment rate) which are the chief determinants but with different magnitudes of their effects.

While studying the trends and structure of scheduled caste employment, it is observed that larger number of scheduled caste population of the nation and of the state joins the economic struggle in comparison to the total population of the state. This is actually associated with the larger share of scheduled caste rural females in the agricultural sector of economy than participation of females of total population. The sector wise analysis of employment indicates that majority of the scheduled caste workers are engaged in primary sector of economy. This is found to be associated with the poor socio-economic status of scheduled caste population. Within the primary sector, agricultural activities provide more and more avenues for scheduled caste workers. The gradual increase of scheduled caste workers in agriculture is due to the given reasons:

- The gradual decline in traditional services of the scheduled caste population.
- The growing agricultural sector leads the demand of more and more agricultural labourers.
- Allotment of the agricultural lands to the landless scheduled caste laborers.

Secondary and tertiary employment groups of occupation are more pronounced in urban population. Secondary group of employment rate surpasses the tertiary employment rate in rural areas whereas, the contrary to it, is observed in case of urban population. The reason for comparatively higher share of tertiary employment in urban areas is the diversification of economy which has increased the opportunities in tertiary sector ranging from high tech jobs to the menial kind jobs. The reason of higher percentage of secondary workers than tertiary workers in rural areas is the lesser development of tertiary sector in rural areas and comparatively larger percentage of household industry workers there.

The regional variations in the distribution of scheduled caste employment under major employment groups are quite noticeable. Primary group of employment of scheduled caste in rural areas are characterized by its very high and high grade in to compact pockets, one eonsist of the districts of few central and eastern districts and the other pocket comprised of majority of southern districts which gradually decreases towards east as well as towards the west. In case of urban population very high and high percentage of scheduled caste primary workers are confined in the central and few western districts whereas majority of southern, western and eastern districts lie in the category of low and very low percentage of urban primary workers. Secondary employment group of activities of scheduled caste rural population shows that its very high and high range are mostly concentrated in the western plain districts, whereas, its medium range is found in only widely scattered districts and low grade is found in the lower half of the state and very low grade is confined to the upper half of the state. In case of urban population this regularity is not maintained and distribution fails to form any regular pattern.

As far as the participation of scheduled caste population in tertiary group of activities is concerned, it gradually increases from east to west in rural

population. A pocket of its medium range is also visible in a pocket of eastern most districts, whereas, southern districts fall in the category of low and very low grades of scheduled caste rural tertiary employment rate. Urban scheduled caste tertiary workers show slightly different distributional pattern. Small pockets of very high and high grade of scheduled caste urban tertiary workers are found in western as well as in eastern districts. Majority of southern and central districts fall in the category of its low and very low grades. The western districts show relatively high participation of scheduled caste people in industries and service sectors because of diversification of economy. Some notable features are found to emerge when the primary, secondary and tertiary groups of economic activities are tested (Karl Pearson's correlation technique and factor analysis) with some demographic and non demographic determinants. The tests signify that industrialization, scheduled caste population growth, density of scheduled caste people, literacy rate of scheduled caste population and per cent of workers in secondary and tertiary occupations are correlated negatively with primary occupations of rural and urban scheduled caste population. The inverse of it is found in case of secondary and tertiary groups of rural and urban scheduled caste populations.

The factor analysis of 31X70 data matrix chosen for the study of the structure of employment of scheduled caste brings about the result that, the six factors which explain around 70 per cent of the total variance in rural scheduled caste population in their descending order of significance are infrastructure cum participation factor, demographic cum educational factor, employment factor, economic factor, cultural factor and infrastructural factor. For their urban counterpart these factors in their order of preference are factor of socio cultural development, factor of economic development, education cum demographic factor, employment cum infrastructure factor, medical cum agriculture factor and education factor.

The identified employment regions based on location quotient reveal that the districts located in northeastern and southern part of the state account for high employment force of scheduled caste whereas the majority of the western and central districts record low employment force. This regional pattern indicates that, barring a few exceptions, the districts with high industrial and urban development are under represented in scheduled caste employment force both in respect of total population and rural population. In urban population the region of low employment force is also observed in a belt covering few eastern and south eastern districts and a prominent region in western part. A belt of medium employment force comprising of central districts running from north to south exist between the region of very low work force in the west low work force in the east and the region of very high work force in the south west.

A general picture that emerged from the regional distribution of economic development shows a few smaller patches of high economic development of scheduled caste people mostly in western and southern part of the state, whereas, the eastern districts of the state record medium and low magnitude of economic development with a few exceptions.

So far as the social development of scheduled caste people is concerned, it shows comparatively regular pattern. High social development of scheduled caste people is observed mainly in the eastern, southern districts of the state. The overall picture of development exhibits a high level of socio-economic development in southern and few western districts of the state in the form of pockets of different sizes, whereas, low level of socio-economic development is found in north eastern districts in the form of a belt.

Establishing a relationship between scheduled caste employment rate and economic development, it is noticed that majority of the districts which record high level of scheduled caste employment with low level of economic development are concentrated in western part of the state. The combination of

high employment of scheduled caste with high economic development is found in few widely spaced districts of eastern, western and south western districts of the state. Medium level of employment with low economic development is observed in a tiny pocket of three eastern districts. The combination of medium level of employment with medium level of economic development covers most of the districts of eastern, southern and central part of the state. Low employment with high and medium economic development is observed in western districts only.

In case of scheduled caste employment rate versus social development, high level of scheduled caste employment with high and medium level of social development is mostly concentrated in southern plateau districts of the state. The high level of scheduled caste employment with low level of social development is identified in three adjacent eastern districts. A big pocket of medium level of employment with high social development is concentrated in the eastern districts. Medium level of scheduled caste employment with medium level of social development is observed in majority of the central and south eastern districts. Low level of scheduled caste employment rate with medium and low level of social development is found in western districts of the study area.

Taking an overall view of the spatial pattern of development, it may be stated in general terms that the pattern of the development of scheduled caste people is uneven. The eastern and southern districts which are relatively less socio-economically developed are providing better employment opportunities for the scheduled caste people. The majority of western districts are showing medium and low level of scheduled caste employment with high, medium and low level of scheduled caste socio-economic development.

SUGGESTIONS

Scheduled caste people being the downtrodden segment of the society should be uplifted in order to bring them into main stream for a balanced regional development. The following measures are suggested for their development.

1. Though untouchability has been given a punishable offence in our constitution (article 17) yet we have been unable to eradicate it. It may be eliminated through absorbing the scheduled caste people in all the sectors of economy and by providing technical know how to them or through educating the masses at various levels. For this purpose Serve Shiksha Movement should be popularized in backward and rural areas where most of the scheduled caste people live.

2. Besides general education with academic training, a number of manual training programmes may be introduced so as to provide elementary means of production to all the scheduled caste students and to prepare them for employment in their traditional occupations through machines. This way the ill-conceived ideas of the society about these occupations may be changed and a sense of dignity of labor may be generated in people.

3. Development of piggeries, skin shearing, meat packing and processing industries in the scheduled caste dominated areas should be enhanced. For this purpose there is a need to improve the means of transportation, communication and storage system.

4. It would be advantageous if the government accentuates on the job training programmes primarily because through such training facilities trained manpower would be available at the lowest possible expenses.

5. In view of the lack of formal education and the large number of illiterate adults, the most important need of the agricultural population is to obtain a basic minimum level of education and literacy in order to understand better methods of crop production, livestock breeding, dairy farming, disease control and marketing.

6. As majority of the scheduled caste workers are working as agricultural labourers or marginal cultivators, so to meet out the problem of unemployment during the agricultural slack season for these persons piggeries and vermiculture should be developed along with the development of apiculture, sericulture, fisheries, poultry farming and dairy farming, horticulture, floriculture depending upon the environmental conditions of various districts. Thus this inter-sectoral diversification in labour force will be the right approach for eliminating poverty from rural scheduled caste population.

7. Employment prospects have to be expanded for women in both rural and urban areas through enhancement in the training facilities for self employment. In order to facilitate the maximum involvement of women in economically, socially and politically productive works, better technology, time and energy saving equipments and household industries should be opened in large number in all the industrially backward areas.

8. Apart from it, scheduled caste information centres should be developed and the people must be informed about the new development plans launched by the government for scheduled caste upliftment and benefits of government policies may percolates to the lowest stratum among the scheduled caste people.

9. Steps may be taken to accelerate the transfer of community lands and reclaimed lands to the small and marginal scheduled caste farmers and

agricultural labourers to minimize the economic gaps between the socially benefited and socially and culturally deprived segments of the society.

10. Due to socio cultural backwardness majority of the scheduled caste people waste a huge amount of money in their social customs and traditions. Thus they should be educated properly to utilize their precious money in various economically productive works.

11. Basic health facilities should be provided in all the areas of the study unit in general and in rural areas in particular where scheduled caste people reside.

12. Free medical and other health related facilities should be provided for poor, deprived and needy scheduled caste people. All the rural areas should be electrified at nominal charges or free of cost.

13. All the above measures will remain neutral and ineffective without having control over the exponential growth of population of scheduled caste people especially in rural areas.

In fine, the study reveals that the scheduled caste population continues to be socially and economically backward section of our society, despite of liberal constitutional provision. So the efforts should be made for the progress of this less developed segment of population. The improvement in their living conditions and educational status will be helpful in minimizing the regional imbalances. Apart from it, their development also requires some sort of social revolution for the creation of congenial atmosphere, where not only the traditionally hardened attitudes of various social groups towards each other are softened but also the entire socio-economic structure of our society is recovered in order to yield quick results on this front. The development of this social group will in turn lead to the development of the whole region by

filling the economic and social gaps between the general people and this backward social group in the state. Moreover the problems of every caste of scheduled castes population should be studied separately so the problem of their unequal development of can also be solved. The study of these castes according to the income levels of these peoples may be helpful in attaining the balanced regional development.

In the opinion of the researcher, development of planning regions should be demarcated objectively in terms of carefully selected groups of indicators pertaining to the significant aspects of scheduled caste employment force and levels of their development. The planning strategy should be formulated in such a way that maximum efforts can be directed towards the social group having low levels of development in the study area, so that they may come up at par with socio-economically developed social groups and the concept of planning with social justice is fulfilled.

GLOSSARY

Local names	Comman names
Bhabhar	Upland covered with boulders and gravels
Tarai	Marshy zone at the foot hill
Jowar	Great millet
Bhangar	Older allyuvium
Khadar	Newer alluvium
Kankar	Calcarious nodules
Loo	Local hot winds
Usar	Alkaline soil with low fertility
Vernas	Castes
Rig veda	Holy scripture of Hindus

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